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UNIVERSITY OF ALBERTA

GERONTOLOGICAL NURSING:
AN ASSESSMENT OF PERCEIVED LEARNING NEEDS

BY

JEAN L. GRESCHUK

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND

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This report is dedicated to the glory of God, with thanksgiving for His provision of strength and health during the conduct of the study.

-Jean L. Greschuk

ABSTRACT

This study in the field of gerontological nursing identified perceived gerontological learning needs of R.N.s employed in long term care facilities in Alberta to obtain information upon which the planning and development of inservice education in gerontological nursing could be based. Two questionnaires were developed based on a conceptual framework outlining learning needs by stage of resident flow. Separate questionnaires were distributed to administrators and R.N.s in one third of the long term care facilities that care mainly for the aged throughout Alberta. Respondents provided information regarding professional and contextual characteristics, perceived knowledge needs, perceived skill needs, perceived feeling (attitude) needs, and program format preferences. Of the 571 questionnaires circulated, 271 were usable and formed the basis of the study.

All responses were summarized by frequency. Means were used to rate learning needs and format preferences. T-tests and analyses of variance were performed where appropriate to determine statistically significant differences in learning need and format preference among respondents with selected characteristics. Knowledge need, skill need, and feeling need variables were then created to which the Pearson correlation coefficient was applied. Also, admission, treatment plan, resident care, discharge, and palliative care variables were created based on the stages of resident flow. T-tests were applied to these variables.

Some significant findings were discovered Many gerontological learning needs perceived as highly important, exist among R.N.s working in long-term care in Alberta. Considerable congruence between administrators and R.N.s existed with respect to the most highly rated learning needs of R.N.s, although administrators tended to give higher ratings. Perceived learning needs of R.N.s remained high throughout the stages of resident flow. However, reported inservice attendance was very low.

From the study, priorities for program development in gerontological nursing were established. Time to attend inservice programming is a problem that needs to be addressed.

This study has provided useful information upon which inservice programming in gerontological nursing in long term care facilities may be based.

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CHAPTER 1

INTRODUCTION

Gerontological nursing is expanding rapidly due to the increasing number of elderly that require nursing care. Many basic nursing programs do not offer courses in gerontology, and those that do lack standardization. Some post basic courses in gerontology are available at a few colleges and universities in Alberta, but few nurses working in long term care (LTC) have availed themselves of this education. Nurses with diverse backgrounds and various experiences work in LTC.

The Canadian Council on Hospital Accreditation (1985) requires that a program be in place for all categories of staff to increase knowledge related to the services offered by long-term care centres. More specifically, the Council outlines that a program of inservice education should provide all employees with the opportunity to keep their job knowledge current and their practices relevant. Furthermore, the program should facilitate the development and improvement of skills and inherent leadership potential (p. 95).

Nurses in LTC are also required to supervise varying levels of nursing assistants. Enhanced teaching, supervision and communication skills are necessary for nurses to optimally fulfill this role. Thus special training is necessary to equip nurses with expertise in gerontological nursing and thereby provide better quality nursing care for the elderly.

Definition of Terms

For the purposes of this study, the following definitions will apply to the specified terms:

Inservice education: Planned professional education beyond the basic nursing program, offered through the employing facility, exclusive of orientation programs.

Gerontology: The study of the aging process including the physical, psychological, social, and spiritual aspects.

Elderly: Persons 65 years of age or older.

Gerontological nursing: Scientific study of the nursing care of the elderly, derived from a specific and evolving body of knowledge pertaining to older persons (Gerontological Nursing Association, 1989, p. 4). Gerontological nursing includes using knowledge of the aging process to design nursing care and services which provide for health, longevity and independence -- or highest level of functioning possible (Werner, 1988, p. 3).

Long term care (LTC) facility for the elderly: A facility where an integrated mix of health, psycho-social support and maintenance services is provided on a prolonged basis to the elderly whose functional capacities are chronically impaired or at risk of impairment (Canadian Hospital Association, 1986, p. 4).

Registered nurse (R.N.): A nurse who has at some time successfully passed the exams necessary to qualify for registration as a nurse and is presently registered with an appropriate body of registration.

Resident: A person who lives in a long-term care facility.

Purposes

Inherent in this study were four purposes. The first purpose was to discover what gerontological learning needs were perceived by the R.N.s employed in LTC facilities in Alberta. The next purpose was to identify what the administrators in these facilities perceived to be the learning needs of R.N.s. The third purpose was to identify discrepancies, should they occur, between the perceptions of the R.N.s and the administrators with respect to learning needs. Finally, the last purpose was to make recommendations regarding inservice programs for LTC facilities based on information forthcoming from this study.

Problem Statement

The purpose of this needs assessment was to obtain data upon which the planning and development of inservice education in gerontological nursing could be based. It was necessary to discover what R.N.s needed to know relative to gerontological nursing. Thus the question was: What are the perceived learning needs of R.N.s who work in Alberta LTC facilities which care mainly for the aged?

Sub-Problems

The sub-problems emerging from the problem statement included the following:

1. What information is available in the literature on gerontological nursing as it relates to the knowledge, skills and attitudes of R.N.s in LTC settings?

2. What gerontological learning needs do R.N.s working in LTC in Alberta perceive with respect to the care of their residents?

3. How do administrators of LTC facilities perceive the learning needs of R.N.s working in LTC?

4. Is there a discrepancy between how R.N.s working on LTC units and administrative staff perceive the R.N.s' learning needs in gerontological nursing?

5. What format do R.N.s and administrators prefer for programs developed to meet the gerontological learning needs?

6. What differences exist in the views of R.N.s when grouped by selected demographic and contextual characteristics concerning perceived gerontological learning needs and preferred program format?

Study Significance

The number of elderly in Canada is increasing. Improved standards of living, better prevention and treatment of diseases, and a reduction of infant mortality are among the major reasons cited for this increase. In North America, the percentage of elderly increased from about 5% of the total population in 1900 to about 9% in 1980 (McPherson, 1983, p. 86). Due to increasing longevity and the baby-boom cohort reaching 65 years of age, it is projected that 17% of our Canadian population will be 65 and

over by the year 2020 (McPherson, 1983, p. 86). Although only 7% of the elderly live in LTC in Alberta (Moore, 1987, p. 2), approximately 20% of them will use LTC facilities at some point in their lives (Institute of Medicine, 1983, p. 171). Thus the demand for gerontological health care is increasing and will continue to increase.

The number of elderly in Alberta is also increasing. In 1986, the median age of Albertans was 29. By 2016, the median age will be between 40 and 36 (Alberta Bureau of Statistics, 1988, p. 6). According to the Committee on Long Term Care for Senior Citizens (1988, p. 1), Alberta has over 190,000 seniors which is about 8% of the population. The number of aged in Alberta is expected to peak at 663,000 or 18.2% of the total population by the year 2031 (Committee on Long Term Care for Senior Citizens, 1988, p. 4).

Long term care facilities are a twentieth century and a western world phenomenon. Caring for the ill elderly was traditionally the responsibility of families. However with increasing numbers of women working, and increased mobility, many of the elderly are left without family support. Thus, the traditional responsibility of caring for the infirm elderly, has been relegated to society at large (Wiberg, 1988, p. 1).

Many nurses are employed in LTC. In Alberta there are 124 total eligible LTC centres (Canadian Hospital Association, 1986, p. 130) of which 94 care mainly for the aged. The number of R.N.s employed in LTC in Alberta is unknown because the Alberta Association of Registered Nurses does not have statistics in this regard. Since most nurses working in LTC

in Alberta are employed in a part-time or casual capacity, the ratio of R.N.s per LTC bed is higher than if the staff quota consisted mainly of full-time R.N.s.

The aged have needs that are as unique as those of any other age cohort in society since, with increasing age, more people experience illness, restricted mobility and reduced self-care capacity (Gioiella, 1986, p. 1). The Alberta Nursing Home Review Panel (1982, p. 18), found that inservice education in nursing homes was inconsistent in quality. Since the Panel believed that the benefits of inservice education included improved care of residents and higher staff morale (p. 18), they recommended "that structured and continuous inservice training programs be provided for staff of all continuing care facilities" (p. 3). In addition because the Panel recognized that in the foreseeable future geriatrics was expected to become the largest single component of private medical practices and public health care, it recommended that "geriatric care be a compulsory subject on the curriculum of medical and nursing students at Alberta universities and colleges."

"Services for older people are only as effective as the people who are planning and providing them" (Provincial Senior Citizens Advisory Council, 1987, p. 24). In 1987, the Provincial Senior Citizens Advisory Council outlined that the lack of gerontological and geriatric content in the curricula of the professional faculties results in some deficiency in the skills of quite a number of people working with the elderly, especially people in the professions such as nursing, medicine, rehabilitation medicine,

psychology and social work. Therefore, they recommended that training programs be developed under the direction of appropriately qualified and interested medical practitioners to give geriatric skills to other health professionals.

The "Mirosh Report" made the recommendation that geriatric and gerontological training for care providers of the elderly be improved. "It is recommended that employers, in conjunction with professional associations, develop inservice training programs and other continuing education opportunities for care providers to enhance their understanding of the skills in caring for the elderly" (The Committee on LTC for Senior Citizens, 1988, p. 65).

"The myth that it does not take much skill or expertise to take care of old people unfortunately still prevails, and old people are still viewed as needing custodial care more than anything else" (Burnside, 1981, p. 13). There is a lag between nursing knowledge and practice for the care of the elderly that is greater than for any other age group (Simms, Pforitz, & Price, 1986, p. 145). The specialty of gerontological nursing has evolved with its specialized technology, knowledge and practice (McCormick, 1983, p. 379).

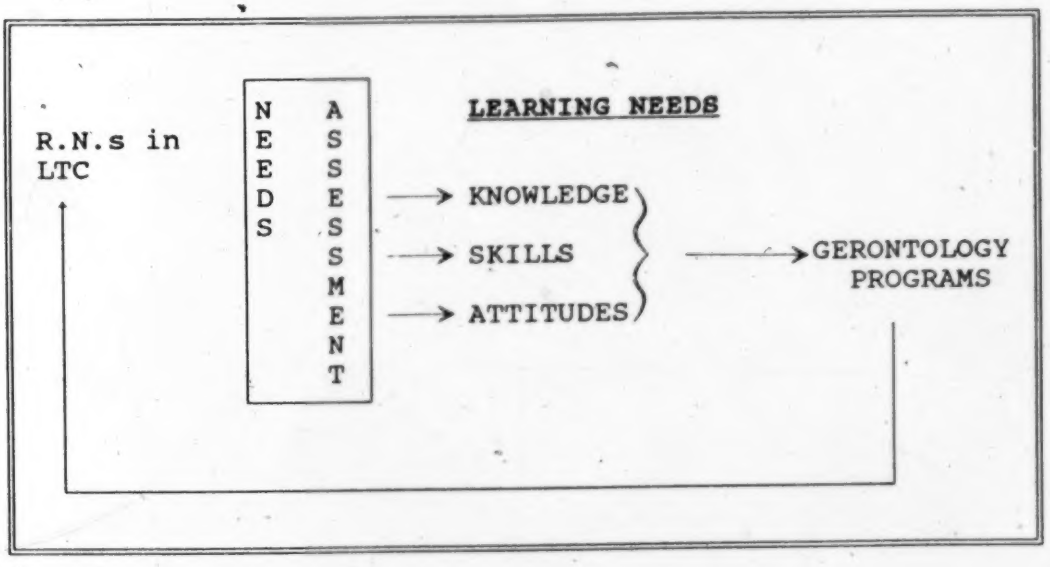
Recently, standards of gerontological nursing have been developed. In May, 1989, the Canadian Gerontological Nursing Association accepted the gerontological nursing standards proposed by the Gerontological Nursing Association Committee of Ontario. Presently, the second draft of the Alberta Gerontological Nursing Standards is under deliberation.

With the increasing number of elderly in Alberta and the apparent inadequate preparation of our nurses, it seems obvious that the learning needs of R.N.s working in LTC in Alberta need to be identified and addressed in order to provide adequate care for the aged in our society.

Conceptual Framework

The related literature suggests that gerontological programs can improve knowledge, skills, and attitudes of nursing staff. A needs assessment can be used to determine what gerontological knowledge, skills and attitudes are needed. This process is represented in Figure 1.

Figure 1. Professional development cycle



According to this model, R.N.s working in LTC will go through a needs assessment to determine their learning needs. Learning needs are differentiated as knowledge needs, skill needs and attitude needs. Based on these assessed needs, gerontology programs could be developed. Once developed, the programs would be presented to the R.N.s. Following program presentation, further needs could then be assessed. Thus the process of identifying needs and preparation of suitable programs to meet those needs would continue throughout the professional development cycle.

Figure 2 outlines learning needs according to the stage of resident flow. In LTC, the resident is admitted, a treatment plan is developed and care is provided. Discharge from the LTC facility or palliative care aimed at relieving symptoms, are also possible parts of the flow.

Throughout the process, certain knowledge, skills and attitudes are required by R.N.s to enable them to provide optimal care to the residents.

Figure 2. Learning needs by stage of resident flow.

ADMISSION 1	TREATMENT PLAN 2	ADMINISTERING RESIDENT CARE 3	DISCHARGE 4	PALLIATIVE CARE 5
KNOWLEDGE SKILLS ATTITUDES	KNOWLEDGE SKILLS ATTITUDES	KNOWLEDGE SKILLS ATTITUDES	KNOWLEDGE SKILLS ATTITUDES	KNOWLEDGE SKILLS ATTITUDES

Many dimensions must be considered in relation to the care of the resident. Figure 3 displays the assumption that resident care may be categorized as organizational or personal. The organizational aspects provide more indirect care for the resident but are of vital importance as they provide a framework which facilitates the more direct personal dimensions of care.

Figure 3. Dimensions of resident care.

ORGANIZATIONAL	PERSONAL
Facility Administration Supervision of N.A.s & R.N.A.s Communication with Health Care Team Communication with Relatives	Physical Medical Psychological Sociological Spiritual

Figure 4 was derived from the three conceptual models outlined. By combining the care dimensions with the stage of resident flow, a questionnaire item matrix was developed that facilitated determination of learning needs according to knowledge, skills and attitudes. This matrix generated 135 categories of items for the questionnaire. For example, the cell meshing relatives and admission contains a knowledge of the role of relatives, communication skills, and an attitude of respect and empathy

towards relatives. Although all categories will have some items, some categories may have many items. Appendix A contains the questionnaire matrix with numbered questionnaire items that pertain to each cell.

Figure 4. Questionnaire item matrix

CARE DIMENSION	STAGE OF RESIDENT FLOW 1	2	3	4	5
	ADMISSION	TREATMENT PLAN	RESIDENT CARE	DISCHARGE	PALLIATIVE CARE
Facility Administration	K S A	K S A	K S A	K S A	K S A
Supervision of NA's and RNA's	K S A	K S A	K S A	K S A	K S A
Health Care Team	K S A	K S A	K S A	K S A	K S A
Relatives	K S A	K S A	K S A	K S A	K S A
Physical	K S A	K S A	K S A	K S A	K S A
Medical	K S A	K S A	K S A	K S A	K S A
Psychological	K S A	K S A	K S A	K S A	K S A
Sociological	K S A	K S A	K S A	K S A	K S A
Spiritual	K S A	K S A	K S A	K S A	K S A

K = Knowledge
S = Skills
A = Attitude

Assumptions

Underlying this needs assessment are the following assumptions:

1. Specific knowledge, skills and attitudes are inherent in the specialty of gerontological nursing.

2. R.N.s working in LTC facilities have perceived learning needs in gerontological nursing.

3. Gerontological learning needs of R.N.s are different from those specializing or practising in other areas of nursing.

4. R.N.s are able to perceive their own learning needs.

5. Administrators are able to perceive the learning needs of R.N.s.

Delimitations and Limitations

The following delimitations and limitations apply to this study:

1. This study focused on the gerontological learning needs of R.N.s working in LTC facilities in Alberta as listed in the Directory of Long-Term Care Centres in Canada, 1986.

2. The LTC facilities concerned care mainly for elderly clients rather than psychiatric, emotionally disturbed, or physically handicapped people of varying ages.

3. Current needs and preferences were the focus of this study rather than future needs and preferences.

4. The study was limited to the responses of the participants from the sampled LTC facilities, received by the researcher within a two month specified period.

5. The study identified learning needs appropriate to programs in inservice education.

6. This study considered the views of administrators and R.N.s in LTC in Alberta, with respect to the perceived learning needs of R.N.s.

Outline of Report

This report is organized into five chapters, the first of which has provided the introduction and background of the study. A review of the literature pertaining to gerontological learning needs appears in Chapter Two, while Chapter Three contains the methodology of the study. In Chapter Four, the data are presented, analyzed and interpreted. To conclude this report, Chapter Five provides a summary of the study, conclusions, and recommendations.

CHAPTER 2

REVIEW OF THE LITERATURE

Many articles and studies addressing gerontology in nursing appear in the literature. This review discusses statistics, attitudes of nurses and student nurses toward the aged, quality of care, gerontological nursing as a specialty, gerontological content of basic nursing programs, effects of gerontological education, learning needs assessments, and preferred gerontological topics for education.

Statistics

Peak health service utilization rates occur above the age of 75 (Moffatt, 1983, p. 1). By 2016, the life expectancy is expected to rise from 73.3 to 78.5 for males and from 80.3 to 83.7 years for females (Alberta Bureau of Statistics, 1988, p. 6). The frail elderly often are not able to care for themselves even with community support services. Children of these people 75 and over are often approaching old age themselves and therefore are unable to provide care. Major cities in Canada are separated by great distances thereby separating families and their older parents who wish to stay in their familiar surroundings (Moffatt, 1983, p. 1). Thus an increased burden to the health care system occurs.

The elderly use more than one third of our total hospital bed capacity while representing less than 10% of the population (Moffatt, 1983,

p. 1). By the year 2,000, 50% of all health care expenses will be related to the care and treatment of our over 65 population (Dychtwald, 1985, p. 65). Because many of the elderly remain in acute care hospitals awaiting placement in LTC facilities, more LTC centres are required. In general, older persons' health problems are chronic, multifaceted and multiple (Speltz, 1982, p. 56).

Attitudes

Society generally devalues age. Butler coined the word "ageism" in referring to the devaluation of older people simply because they are old (1978, p. 4). Society places high value on youth, activity, beauty, and wealth. Consequently, old age is viewed with concomitant loss of health, income, status, and value (Gunter, 1971, p. 466). Such an attitude can indirectly affect the delivery of services to the aged (Keith, 1977, p. 463).

A 1986 report published by the American Nurses Association Council on Gerontological Nursing predicts a 466% increase in demand for nurses prepared in gerontological nursing (cited in Collins & Brown, 1989, p. 10). Unfortunately, the proportion of health personnel who wish to engage in gerontological practice is not increasing accordingly (Tollett & Adamson, 1982, p. 20). Obstacles to increasing the attractiveness of gerontological nursing include prejudicial stereotypes, fear of aging, pessimism about outcomes, weak administrative support, inadequate staffing, and lower salaries, all of which contribute to reduced prestige and excitement in the specialty (Collins & Brown, 1989, p. 9).

Ranking and Burggraf found in their study that 80.4% of nurses currently working with the elderly on a daily basis prefer working with younger patients (1983, p. 273). Few student nurses showed a preference for geriatric nursing (DeLora & Moses, 1969, p. 143; Kayser & Minnigerode, 1975; Knowles & Sarver, 1985). Several studies found that nurses have negative attitudes about caring for the aged (Gillis, 1973, p. 518; Gunter, 1971, p. 467; Taylor & Harned). In a questionnaire administered to a recent graduating class of nurses, 80% of the respondents indicated they "would not" choose a career working primarily with the aged (Collins & Brown, 1989).

In 1971, Campbell studied the attitudes of nursing personnel toward the geriatric patient. This study involved licensed practical nurses (LPNs), nursing assistants (NAs), and R.N.s. Although all three groups preferred working with adults aged 18 to 65 years, LPNs and NAs preferred working with older people more than did R.N.s. Salary increase or shift preference did not significantly increase the willingness to work with the nonpreferred (older) patient. It was therefore recommended that nursing education and inservice training should be structured to attempt to modify or change the stereotyped attitudes held concerning older people. In addition, Campbell suggested that inservice education should be geared to the particular needs and understanding level of the group involved.

Quality of Care

The attitude of caregivers towards a population is an essential component of effective care (Martin & Buckwalter, 1984, p. 53). Keith (1977, p. 463) suggested that the attitudes of professionals affect not only social policy but the quality of care for older persons.

According to a study done by Elliot and Hybertson (1987) the personal and social behaviors of geriatric patients and their degree of functional independence, are related significantly to the feelings nursing personnel expressed about providing care. NAs expressed negative feelings about caring for extremely dependent elderly patients with socially unacceptable and displeasing behaviors (p. 571). Assuming the possibility of a relationship between attitude and quality of care given, the authors recommended two types of inservice education for the NAs. First, they should have education concerning aging and pathology, including behavioral manifestations of age and disease. Second, attitudes need to be isolated from patient care. An awareness of the possible relationship between attitudes and care could lead to more compassionate and sensitive service to geriatric nursing home patients and increased job satisfaction for NAs (p. 571).

Gerontological Nursing as a Specialty

With the frequent permanent or chronic illness experienced by the elderly, treatment is directed towards rehabilitation, retardation of deterioration, or maintenance, rather than cure (Evashwick, 1982, p. 51).

In 1966, nursing recognized geriatrics as a specialized area of practice with the establishment of the American Nurses Association Division of Geriatric Nursing Practice. This name was changed in 1976 to the Division of Gerontological Nursing Practice to permit wider scope in the specialty (Gioiella, 1986, p. 2). The Division has agreed that gerontological nursing practice involves the ability to incorporate an understanding of the following into nursing practice:

--the ramifications of normal aging that may be supported through health promotion

--the different rates at which people age

--the variable characteristics of the older population

--the interrelationship between cultural, social, spiritual, economic, psychological, and biological factors

--the multiplicity and collectiveness of an older person's losses

--the frequently atypical response of the older adult to disease and to the treatment of disease

--the accumulated, often disabling effects of multiple chronic illnesses or degenerative processes

--the cultural values associated with aging and social attitudes towards the older adult (cited in Gioiella, 1986, p. 2).

This nursing specialty is based on a specific and evolving body of knowledge pertaining to the older person encompassing theory, research, and standard practices. Gerontological nurses have a responsibility to

continue their education and to contribute to the testing and expansion of knowledge in this area (Gerontological Nurses Association, 1989, p. 4).

Basic Nursing Education Programs

Gerontological nursing has been slow to expand. For too many years countless surveys, articles and reports have been telling us that the majority of our curricula are weak in gerontological content and presentation (Atchison & Bryant, 1988, p. 1).

A 1986 study found that fewer than 3% of faculty teaching in baccalaureate programs for nurses have graduate preparation in gerontological nursing (Edel, 1986, p. 29). Faraday (1980) found that supportive personnel (physiotherapists, NAs, and LPNs) are required to perform tasks for which they have not been adequately trained. Thus standardization and upgrading of training is a basic requirement. Also, at a national symposium on LTC issues in the United States, respondents in a study rated education overwhelmingly as the most important issue (Miller & Goldman, 1986).

Basic nursing education programs have been slow to include gerontology as a specialty area (English, 1986, p. 31), and it is not tested on Canadian licensure exams.

> The profession of nursing might never have a finer hour than at that point at which it would bring its collective resources to bear upon the issue of the moral responsibility of the society to provide adequate care for its sick and aged citizens. (Yarling, 1977, p. 50)

Effects of Gerontological Education

Nodhturft, Banks and Macmullen (1986) suggested that the use of gerontological education programs can lead to increased knowledge levels and improved attitudes toward the elderly and the aging process (p. 25). Robb (1979) found that a second-level seven week gerontology course resulted in a significant increase in more positive behavioral intentions, but no significant change in beliefs. A study done by Gunter (1971) reported that, after a course in gerontology, fewer students expressed a strong interest in working with the aged. Gomez, Otto, Blattslein and Gomez (1985) investigated the impact of a three week, eight hour per day clinical experience of caring for the ill elderly in nursing homes by baccalaureate students. They found that the students had more positive attitudes toward the elderly after their experience. After a gerontology course with the "well" elderly, nursing students demonstrated an improved attitude in Hart, Freel and Crowell's 1976 study. Also, when an experiment with the "ill" elderly occurred after a guided experience with the "well" elderly, attitudes toward the aged did not decrease significantly.

While a study done by Robb and Malinzak (1986, p. 25) showed that knowledge is not necessarily a sufficient condition to ensure quality practice, other research done by Almquist, Stein, Weiner and Lynn (1981) demonstrated that gerontological educational programming resulted in greater knowledge and more positive attitudes toward the elderly. Nursing directors who participated in Fisher's (1981) study stated that the quality of care in their facilities was positively affected by a course in gerontology.

There is however, no research evidence that inservice education actually produces improved nursing care.

Through use of a quiz, Palmore (1988) reported that as education increased, knowledge about aging increased (p. 36). Also, he found considerable and fairly consistent evidence that knowledge about aging as measured by the Facts on Aging Quiz 1 (FAQ1) has a modest, but significant correlation with attitudes toward aging. More specifically, those people with higher knowledge levels tended to have less negative and more neutral attitudes toward the aged (p. 43). Using this quiz, Greenslade (1986) established that a group of Canadian nurses working with the elderly with no gerontology training scored 61% while those nurses with some post graduate training in gerontology scored 83%.

Although study reports are conflicting, most supported the concept that education is the first step towards improving the quality of care for elderly patients.

Learning Needs Assessment

Betz (1989, p. 40) recommends performing a needs assessment with nurses practicing in gerontology so that suitable programs may be developed. Knowles explains that a learning needs assessment is the process of diagnosing gaps between the present level of competencies and a higher level required for effective performance as defined by a person, an organization, or a society (1980, p. 85). A needs assessment in which learners diagnosed their own learning needs would produce data to

serve as the basis for planning a comprehensive educational program and could also build commitment to the program by the participating staff and management (Bowman, 1987, p. 116).

One of the prime benefits of an educational needs assessment is that staff are more satisfied with the programs offered (Bowman, 1987, p. 116). Bowman discovered that nurses who participated in a needs assessment one year previously, rated their satisfaction with educational programs higher than those who did not participate or who did not remember participating. Chesney and Beck's 1985 study found that nurses who identified a need for continuing education in patient assessment rated themselves as having more skill than nurses who did not identify such a need (p. 41). Canar and Johnson (1986) developed a tool whereby learning needs are identified by measuring gaps between the employees' perceptions of the importance of statements and their ability to meet the need identified in each.

A needs assessment is not only the first step in planning educational programs, but it is also an integral part of an ongoing process of assessment, program development, implementation and evaluation (Bowman, 1987, p. 117). From the literature reviewed, positive reports have been evidenced with respect to needs assessments.

Preferred Gerontological Topics

Various types of research in the nursing field have indicated preferred gerontological topics among the respondents. On the basis of

applicability and interest, student nurses rated topics of Fisher's (1981) course in gerontology. The most important topics included normal physical change and aging; organic brain syndrome; depression and suicide; sensory training, reality orientation, and motivation; bowel and bladder continence and fluid balance; communication disorders; and drugs and the elderly.

In 1982, Headricks designed a study to identify the perceived learning needs of nursing staff in a nursing home setting upon which future educational programs could be constructed. She developed one questionnaire checklist for the perceived learning needs of R.N.s and one for NAs. The three most frequently requested categories of information for R.N.s in order of priority were the following: aging process (with emphasis on death and dying; theories of aging and ways they affect nursing care; and components of aging--physical, psychosocial and social aspects); nursing intervention (including measures and therapies; preventive measures; nutrition and feeding); and managing problems related to the aging process (with emphasis on teaching, demonstration, and exhibits; recreation and exercise; environmental safety and supports). As this needs assessment was performed in only a nursing home setting, Headricks recommended administration of questionnaires in different types of LTC settings (Headricks, 1982, p. 19-20).

A learning needs assessment of LTC staff nurses and administrators was conducted by Werner (1988) in Alberta using a modification of Headrick's (1982) questionnaire. The most highly perceived learning

needs of staff nurses included sexuality, nutrition and feeding, nursing team responsibilities and relationships with NAs, group therapy, peer review process, cancer, social assessment of the elderly, reality therapy, planning, certification of nursing personnel, and health screening. Significant differences existed between how nursing administrators and staff nurses perceived the learning needs of R.N.s on LTC units for the elderly.

Miller (1987) also did a study in Alberta. Using a three round modified Delphi technique, she attempted to identify content on aging for baccalaureate nursing programs. The ten most important items priorized by practicing nurses were work as a member of an interdisciplinary team, assessment of the elderly, medication interventions, medication problems in old age, institutionalization, fluid and electrolyte interventions, safety precautions, relocation problems, discharge planning, and advocacy interventions.

Research was done with community health and nursing home nurses to identify gaps in their basic preparation and their present needs (Volinn, 1982). The most favored topics for continuing education were gerontological changes, drug use and effects, and nursing intervention (p. 107). In addition, 66.2% of the nurses stated that more gerontology theory in their basic education would have been helpful in improving their quality of geriatric care (p. 107).

Using a questionnaire format, Wright (1987) purposed to discover the learning needs of R.N.s and LPNs. For R.N.s, the most desired

educational topics to meet learning needs were medications--classification or interactions, death and dying, legal aspects, resident rights, and physical assessment or management. Although different nursing units reflected different learning needs, a fairly close consensus occurred on a number of topics which could then be used for decision making about programming (p. 11).

Since R.N.s also provide supervision and instruction for NAs and registered nursing assistants (RNAs), Wiberg investigated the duties and training needs of NAs who care for the elderly. She concluded that several skills and procedures required ongoing instruction (1988, p. 109). This instruction would most appropriately be done by a nurse (p. v). Thus ongoing teaching, supervision, and communication skills are required of nurses.

As the topics evolving from the varying needs assessments differed among the studies, its seems obvious that needs assessments must be individualized to the group for whom programs are being planned.

Summary

Through existing statistics and population projections, it becomes readily apparent that Canada's elderly population is increasing quickly. Since people over the age of 75 use health services the most, our health care system must plan appropriately to accommodate this anticipated increased demand. Currently, not enough nurses are trained appropriately or prefer working with the elderly. Although information in the literature is

conflicting, it seems that educational programs have helped improve attitudes of nurses. Several needs assessments have been done among nursing groups working with the aged and differing preferred topics have been identified. These topics are related to knowledge, skills, attitudes, theory, and issues. Separate groups of people appear to have different learning needs, suggesting that needs assessments should be specific to the nurses for whom educational programs are being planned.

Whereas previous studies have taken an academic approach by identifying curriculum needs, no research to date has focussed on patient flow in the process of determining learning needs. Another area that has not been explored is that of the gerontological learning needs of R.N.s who work in LTC facilities throughout Alberta.

CHAPTER 3

METHODOLOGY

Questionnaire Development

Development of the Instrument

Questionnaire development was based on the conceptual framework which included the professional development cycle, learning needs by stage of resident flow, and dimensions of care (see Figures 1, 2, & 3). After the learning needs by stage of resident flow were emmeshed with the dimensions of resident care to develop a questionnaire matrix (see Figure 4), each cell in the matrix was considered in developing the questions. Appendix A contains this expanded questionnaire matrix with numbered questionnaire items that pertain to each cell. Questions were based on knowledge, skill, and attitude needs. Demographic data also were gathered.

In consultation with people knowledgeable in gerontological nursing, some revisions were made to the initial questionnaire. It was decided that two questionnaires were necessary, one for R.N.s and one for administrators. The "skill needs" section was expanded; the "attitude needs" were made more subjective than analytical; and some clarification of items was required. At this point, the category "attitude needs" was retitled "feeling needs" to cause less intimidation of the participants. It is recognized that "feelings" and "attitudes" are not identical terms. A person

may have a feeling of empathy but an attitude of concern. Feelings are more subjective and thus more attuned to perception.

Coding of questionnaires by facility was considered. The decision was made not to code questionnaires to ensure anonymity of the respondents. Thus it was not possible to state the distribution of responses by facility.

Pilot Study

A pilot study of the questionnaire was carried out with LTC staff in the employing health centre of the researcher. As this was a new LTC facility, it was not listed in the Directory of Long-Term Care Centres in Canada, 1986 from which the study sample was drawn. Thus the sample was not damaged.

Consent to conduct the pilot study was obtained from the Director of Patient Services and the Coordinator of LTC. The researcher attended a LTC meeting and explained the research and R.N. involvement. A letter was drafted explaining the proposed study, administrative support, and the purpose of the pilot study (see Appendix B). Anonymity of responses was assured. Questionnaires with the letter of explanation were circulated in uncoded envelopes to R.N.s and administrators.

Return rate of completed questionnaires for the pilot study was 100%. In total, two administrator and seven R.N. questionnaires were returned. Five questionnaires included questions or suggestions for improvement.

These suggestions were considered worthwhile and incorporated into the revised questionnaire. Some items were clarified (for example, "friendlier" was replaced by "more congenial"). In the "feeling need" category, the word "should" was changed to "need." The revised questionnaire which was used in the main study appears in Appendix C.

Data Collection

Sampling

The target population considered was the total number of R.N.s employed as staff nurses and administrators (directors of care, coordinators, supervisors, head nurses, and educators) in LTC facilities of Alberta that care mainly for the elderly. The 94 gerontological LTC facilities were categorized as small (30 with one to 50 beds), medium (34 with 51 to 100 beds), or large (27 with more than 100 beds). Then a cluster sample of each category of LTC facility in Alberta was systematically selected by including every third LTC facility. All of the nursing administrators and R.N.s employed in these sampled facilities were asked to participate, thereby providing the sample for the study.

Contact

The directors of patient services in the LTC facilities were contacted by phone and by letter (see Appendix D). The purpose of the research

was explained. As only consolidated findings were to be reported, all responses would be treated as confidential and anonymous.

One major LTC facility withheld approval for participation until the study was sanctioned by their research committee. A three week delay thus ensued.

Distribution

Once consent was received verbally, by phone, questionnaires with stamped, self-addressed envelopes and letters explaining the study (see Appendix E) were mailed to the director of patient services or preferred contact person, for distribution during a specific time period. They were to be returned individually, by mail.

Follow-up

Follow-up procedures involved three approaches. First, during a workshop at which many Alberta LTC educators were present, the researcher was invited to explain the research and encourage respondent participation. Then a follow-up letter was circulated to the preferred contact person in each sampled facility (see Appendix F). The third approach involved submitting an article to an LTC Alberta newsletter which outlined the study and encouraged questionnaire return.

A two month period was allowed for questionnaire return. This time period included the follow-up provisions mentioned. These procedures resulted in the following response rate.

Questionnaire Resonse Rate

Table 1 outlines the response rates of R.N.s and administrators. In total, 571 questionnaires were circulated which included 84 for administrators and 487 for R.N.s.

Table 1

Questionnaire Response

	Questionnaires				
Group	#Sent	#Ret'd	%Ret'd	#Usable	%Usable
Adminis-trators	84	78	93	77	92
R.N.s	487	203	42	194	40
Total	571	281	49	271	47

The response rate of administrators was very high (93%). This may indicate that administrators identified the gerontological learning needs assessment as important and worthy of their support.

A lower response rate resulted from the R.N.s (42%). This may be partially related to the study timing (May, June and July) which was during

vacation time for many R.N.s. Also, since most R.N.s in LTC are employed in a part-time capacity, work schedules may have influenced response rate. Thus vacations and part-time scheduling may have resulted in some R.N.s not receiving questionnaires.

Data Analysis

Method of Data Analysis

The statistical computations used in this research were frequencies, percentages, and means, which were generated by the SPSSX package.

First, the demographic characteristics obtained through the questionnaire from the respondents were summarized.

Then, the perceived needs of the participants were summarized. A t-test was used to determine if significant differences in content area existed among respondents with selected characteristics. Analysis of variance followed by the Scheffé procedure was also used to determine if specific characteristics of respondents were significant.

The preferences for program delivery format were summarized. A t-test was then done to determine if statistical differences in delivery preferences existed between respondents according to specific characteristics.

For each respondent, three new variables were then created identified as knowledge need, skill need, and feeling need by combining

the relevant items from the questionnaire. The Pearson correlation coefficient was then applied to the variables.

Since this study was based on a conceptual framework in which learning needs of R.N.s are a function of the stage of LTC resident flow, means were calculated for each cell in the questionnaire matrix. The means were based on both administrator and R.N. responses. New variables entitled admission, treatment plan, resident care, discharge, and palliative care were created. Then means for each variable were calculated to determine the extent of learning needs at each stage of resident flow. A t-test was performed to discover significant differences between administrator and R.N. responses in relation to stage of resident flow. Respondent comments obtained at the end of major need areas were categorized and summarized by the researcher.

CHAPTER 4

RESEARCH FINDINGS

The research findings of this study are divided into five sections. The first part of the chapter presents agency characteristics. Next, respondents' professional characteristics are addressed. The perceptions of learning needs are then discussed followed by analysis of needs according to R.N. characteristics. The last section presents perception of learning needs according to stage of resident flow.

It must be noted that there are various ways of interpreting learning need. A high need could indicate that the item is perceived as important. Also, a high need could mean that the need area is not well developed within the individual (similar to Knowles "gap" theory cited in Chapter 2). Since respondents were not asked specifically to rate each item by importance as well as need, clarification of this dilemma is difficult. The writer has used the second meaning of need in the interpretations.

Agency Characteristics

Table 2 outlines the agency characteristics consistent with the sub-groups of administrators and R.N.s.

Funding

As can be evidenced in Table 2, most administrators (65%) and R.N.s (75%) were employed in facilities which were publicly funded.

Length of Operation

Length of operation was another agency characteristic that was detailed in Table 2. The category of 20 years or more, contained the most respondents for both administrators (65%) and R.N.s (50%).

Number of Beds

In Table 2, the facilities with 101 beds or more had the largest respondent groups for administrators (52%) as well as R.N.s (43%). The smallest respondent groups for administrators (12%) and R.N.s (22%) were from facilities with 50 beds or less.

Table 2

Agency Characteristics by Sub-group

	Administrators		R.N.s	
Characteristic	#	%	#	%
Funding				
Publicly Funded	50	65	146	75
Privately Funded	26	34	46	24
No answer	1	1	2	1
Length of Operation				
Less than 5 years			3	2
5-9 years	6	8	26	13
10-14 years	9	12	31	16
15-19 years	10	13	37	19
20 years or more	50	65	96	50
No answer	2	3	1	1
Number of Beds				
1-50	9	12	42	22
51-100	28	37	67	35
101 or more	40	52	84	43
No answer			1	1

Respondents' Professional Characteristics

Professional characteristics to which respondents were asked to respond included: major role in nursing, employment status, total years of nursing work experience, years of nursing work experience in gerontology, and current level of completed education. In addition, administrators were asked how long they had been in an administrative position while R.N.s were questioned regarding the number of inservice hours in which they had participated. Table 3 contains these data.

Major Role in Nursing

The largest subgroup within the administrator group encompassed supervisors, coordinators, or head nurses (47%). These results are not surprising since fewer directors or nurse educators are employed per facility than are supervisors, coordinators, or head nurses. The largest number of R.N.s reported their role as staff nurse (95%). This again is to be expected since most R.N.s who are not administrators (as specified in this study) are employed as staff nurses.

Employment Status

Most of the administrators (77%) reported working full-time; whereas the majority of the R.N.s stated that they worked part-time (72%). Employing part-time R.N.s offers greater flexibility of scheduling within employing facilities.

Table 3

Professional Characteristics of Respondents

	Administrators		R.N.s	
Characteristic	#	%	#	%
Major role				
Administrator/Director	18	23		
Supervisor/Coordinator /Head Nurse	36	47		
Nurse Educator	21	27		
Staff Nurse			185	95
Other	1	1	7	4
No answer	1	1	2	1
Employment Status				
Full-time	59	77	53	27
Part-time	17	22	140	72
No answer	1	1	1	1
Work Experience				
Less than 2 years			5	3
2-4 years	5	7	12	6
5-7 years	5	7	22	11
8-10 years	6	8	24	12
11 or more years	61	79	131	68
Work Experience in Gerontology				
Less than 2 years	5	7	27	14
2-4 years	11	14	40	21
5-7 years	15	20	42	22
8-10 years	17	22	34	18
11 or more years	29	38	51	26
Education level				
R.N. Diploma	31	40	137	71
Post R.N. Diploma	24	31	28	14
Baccalaureate	18	23	10	5
Masters/Doctorate			2	1
Other	1	1	12	6
No answer	3	4	5	3

Number of Years of Nursing Work Experience

Most administrators (79%) and most R.N.s (68%) reported having 11 or more years of nursing work experience. Only 7 % of administrators and 9% of R.N.s related less than five years of nursing work experience. These findings suggest that more older nurses are employed in the LTC field. Perhaps they prefer the routineness offered by LTC rather than the unpredictability of acute care nursing.

Number of Years of Nursing Work Experience in Gerontology

The largest category of nursing work experience in gerontology is in the 11 or more years group which contains 38% of administrators and 26% of R.N.s. Only 21% of administrators and 35% of R.N.s have under five years experience in gerontology. Since this figure is higher than those respondents with less than five years nursing work experience, it may be assumed that many respondents have nursing experience in other fields as well as in gerontology.

Education Level by Sub-group

Most (71%) R.N.s have no formal academic preparation other than the completion of the R.N. diploma program. As for administrators, 40% have their education at the R.N. diploma level. A baccalaureate degree is the status of 23 % of administrators and 5% of R.N.s. Only two respondents (both R.N.s), reported having a graduate degree. In total,

55% of administrators and 21% of R.N.s have education beyond the R.N. diploma level.

Years in Administration for Administrators

As shown in Table 4, the years in administration varies considerably. As the largest group, the two to five year category contained 29% of the respondents. Many administrators (49%) had been in administration for five years or less while 25% had been administering for six years or more. Only 13% had been in administration for 10 years or more.

It must be noted, however, that many respondents (27%) did not answer this question.

Table 4

Years in Administration for Administrators

Experience	#	%
Less than 2 years	15	20
2-5 years	22	29
6-9 years	9	12
10 years or more	10	13
No answer	21	27

Inservice Education of R.N.s.

As Table 5 illustrates, 22% of R.N.s reported no inservice hours during the last two years and 33% reported one to 10 hours. In total, 55% reported 10 hours or less of inservice attendance. Ten hours of inservice education is quite minimal. This finding could be related to shortage of staff, limited inservice programming or low staff motivation.

Table 5

Inservice Education of R.N.s in Last Two Years

Hours	#	%
None	42	22
1 to 10	63	33
11 to 20	34	18
21 to 30	21	11
More than 30	29	15
No answer	5	3

Perceptions of Learning Needs

The respondents rated their perception of need on a five-point Likert scale. The rating included knowledge needs, skill needs, feeling needs, and format preferences. Possible responses ranged from one (low need), to five (high need). In addition, respondents could indicate other content topics in each of the areas for which they perceived a need.

The range of the mean responses varied within each category for both administrators and R.N.s. In ordering these items, the means for administrators ranged from 2.40 to 4.55 for all areas, whereas for R.N.s, the means ranged from 2.05 to 4.33. The lower the mean for each topic, the less highly rated the topic was as a learning need. Multiple t-tests were performed to determine if statistically significant differences existed between administrators and R.N.s for selected characteristics.

Knowledge Needs

Even though there were only three statistically significant differences between administrator and R.N. ratings, Table 6 displays a general trend towards higher ratings by administrators than by R.N.s. Although the differences in means were small, this suggests a general tendency for administrators to rate needs higher than R.N.s..

Table 6

Group Comparison of R.N.s' Knowledge Needs

Item	Administrators $\bar{X}$	R.N.s $\bar{X}$	t	p
Policies	3.08	2.92	-0.97	.33
Resident rights	3.78	3.57	-1.52	.13
Role of team members	3.36	3.12	-1.49	.14
Theories of aging	3.70	3.57	-0.85	.40
Physical aspects	3.77	3.72	-0.31	.76
Psychological aspects	4.12	4.02	-0.72	.47
Social aspects	3.96	3.82	-1.04	.30
Sexuality and aging	3.88	3.70	-1.23	.22
Losses & grief	3.95	3.94	-0.03	.97
Death & dying	3.83	3.98	1.03	.30
Falls & restraints	4.04	3.76	-1.92	.06
Resident mobility	4.01	3.80	-1.48	.14
Hygiene	3.09	3.13	0.27	.79
Nutrition	3.47	3.63	0.91	.36
Physical assessment	4.09	4.03	-0.47	.64

Table 6 (continued)

Group Comparison of R.N.s' Knowledge Needs

Item	Administrators $\bar{X}$	R.N.s $\bar{X}$	t	p
Psychological assessment	4.21	4.07	-1.15	.25
Sociological assessment	4.04	3.83	-1.69	.09
Spiritual assessment	3.92	3.56	-2.58	.01*
Rehabilitation procedures	3.82	3.77	-0.32	.75
Drug & therapy interactions	4.23	4.33	0.77	.45
Incontinence	3.58	3.25	-2.18	.03*
Hearing impairment	3.34	3.15	-1.24	.22
Vision impairment	3.32	3.13	-1.32	.19
Cognitive impairment	4.18	3.98	-1.48	.14
Diabetes	3.05	3.36	2.12	.04*
Cancer	3.17	3.25	0.64	.52
Depression	4.21	4.04	-1.38	.17
Alzheimer's Disease	4.17	4.19	0.14	.89
Heart & blood vessel disease	3.50	3.54	0.28	.78

Table 6 (continued)

Group Comparison of R.N.s' Knowledge Needs

Item	Administrators $\bar{X}$	R.N.s $\bar{X}$	t	p
Stroke	3.43	3.58	1.10	.27
Suicide	3.75	3.61	-1.08	.28
Ethical aspects	4.32	4.10	-1.79	.08
Legal aspects	4.22	4.05	-1.29	.20
Settling in problems	4.12	3.88	-1.77	.08
Culturally determined behavior	3.87	3.79	-0.60	.55
Awareness of residents' past, present and future	3.89	3.73	-1.21	.23
Spiritual needs	3.64	3.42	-1.56	.12
Standards of care	3.83	3.72	-0.76	.45
Government requirements	3.82	3.76	-0.37	.71

Note. *$p \leq .05$

All of the knowledge needs means except one, were rated above three which was the midpoint of the Likert scale. Administrators perceived all of the knowledge needs for R.N.s above the midpoint of three. The knowledge need with a mean below three was the topic of policies, which was rated as 2.92 by R.N.s.

Table 7 is derived from Table 6 and displays the top rated knowledge needs for each sub-group. Of the top ten knowledge needs identified by both administrators and R.N.s, nine were similar. These similar knowledge needs included ethical aspects of resuscitation, drug therapy and interactions, legal aspects of negligence, depression of the aged, psychological assessment of the aged, cognitive impairment, Alzheimer's disease, psychological aspects of aging, and physical assessment of the aged.

Table 7

Top 10 Knowledge Needs

Administrators	R.N.s
Ethical aspects of resuscitation	Drug therapy and interactions
Drug therapy and interactions	Alzheimer's disease
Legal aspects of negligence	Ethical aspects of resuscitation
Depression of the aged	Psychological assessment of the aged
Psychological assessment the aged	Legal aspects of negligence
Cognitive impairment	Depression of the aged
Alzheimer's disease	Physical assessment of the aged
Settling in problems of new residents	Psychological aspects of aging
Psychological aspects of aging	Cognitive impairment
Physical assessment of of the aged	Death and dying

Other knowledge needs of R.N.s. From the 271 respondents, 33 "other" knowledge needs were mentioned. The most frequently mentioned other knowledge needs were guardianship or trusteeship (4), and the role of the residents' families (4) (Table 8)..

Table 8

R.N.s' Other Knowledge Needs

Item	Frequency
Standards of documentation	1
Negligence-What is it?	1
Problem oriented charting	1
Guardianship/ trusteeship	4
Role of residents' families	4
Informed consents	1
Communication in other languages	1
Dependent adults	1
Family counseling	1
Patient classification	1
Residents'dignity	2
Rights of R.N.s with residents	1
Individuality	2
Constipation	1
Mental Illness	2
Sensory deprivation	1
Interactions between caregivers and residents	1
Interactions between caregivers	1
Quality assurance	1
Alternatives to institutions	1

Table 8 (continued)

R.N.s' Other Knowledge Needs

Item	Frequency
Non-patronizing attitude development	1
Staff burnout	1
Behavior problems	2

In summary, it may be noted that both administrators and R.N.s were aware of high learning needs in the knowledge area. The most highly rated items are reflective of the more current demands placed on R.N.s who work in LTC facilities today.

Skill Needs

The means of the skill needs were all above three for both administrators and R.N.s. A multiple t-test revealed six items that were statistically significant (as shown in Table 9). As was the case for knowledge needs, there was a clear tendency for administrators to rate needs higher than did R.N.s.

Table 9

Group Comparison of R.N.s' Skill Needs

Item	Administrators $\bar{X}$	R.N.s $\bar{X}$	t	p
Matching work assignments	3.64	3.41	-1.50	.13
Supervising NAs & RNAs	3.83	3.54	-1.92	.06
Teaching NAs and RNAs	3.97	3.64	-2.15	.03*
Communicating with NAs and RNAs	3.97	3.59	-2.34	.02*
Coordinating nursing care	3.84	3.51	-2.19	.03*
Evaluating nursing care	4.05	3.66	-2.79	.01*
Participating as a team member	3.62	3.35	-1.62	.11
Communicating with team	3.68	3.36	-1.87	.06
Communicating with residents	3.71	3.51	-1.19	.24
Communicating with doctors	3.45	3.55	0.57	.57
Encouraging participation of relatives in care	3.87	3.78	-0.58	.57
Managing conflict with relatives	4.01	3.94	-0.53	.60

Table 9 (continued)

Group Comparison of R.N.s' Skill Needs

Item	Administrators $\bar{X}$	R.N.s $\bar{X}$	t	p
Communicating with relatives	3.71	3.73	0.12	.91
Listening	3.94	3.66	-1.64	.10
Planning for discharge	3.49	3.24	-1.57	.12
Providing palliative care	3.84	3.90	0.38	.70
Providing recreation and exercise	3.40	3.40	-0.01	.99
Planning nursing care	3.77	3.54	-1.41	.16
Advocating for residents	3.91	3.53	-2.49	.01*
Lifting, transferring and moving residents	3.79	3.56	-1.42	.1[illegible]
Maintaining safety	3.74	3.53	-1.30	.20
Maintaining privacy	3.56	3.44	-0.72	.47
Monitoring wandering	3.91	4.23	-3.10	.00*

Note *$p \leq .05$

Table 10 is derived from Table 9 and displays the top rated skill needs for each subgroup. Eight of the ten most highly rated items for both groups were identical. These common topics included managing difficult behavior, evaluating nursing care, managing conflict with relatives of residents, teaching NAs and RNAs, listening, monitoring wandering behavior, advocating for residents, and encouraging participation of relatives in care.

Other skill needs of R.N.s. The other skill needs outlined in Table 11 which were most highly emphasized by the 13 contributors were managing problem behavior (6) and managing time (2). These two items are linked since management of problem behavior among residents requires more staff time. In addition, time management is probably linked to the current nursing shortage being experienced not only in Alberta, but also throughout Canada and North America. "Managing difficult behavior" was included on the questionnaire and is similar to "managing problem behavior." Since the latter skill was included by both groups under "other skill needs," further emphasis is added to this need.

Table 10

Top 10 Skill Needs

Administrators	R.N.s
Managing difficult behavior	Managing difficult behavior
Evaluating nursing care	Managing conflict with relatives of residents
Managing conflict with relatives of residents	Providing palliative care
Teaching NAs and RNAs	Monitoring wandering behavior
Communicating with NAs and RNAs	Advocating for residents
Listening	Encouraging participation of relatives in care
Monitoring wandering behavior	Communicating with relatives of residents
Advocating for residents	Listening
Encouraging participation of relatives in care	Evaluating nursing care
Coordinating nursing care	Teaching NAs and RNAs

Table 11

R.N.'s Other Skill Needs

Item	Frequency
Managing time	2
Managing diversional activity	1
Managing multicultural & multilingual residents	1
Explaining staff shortage	1
Managing legal responsibilities	1
Advocating for nurses	1
Managing problem behavior	6

The percentage of residents with problem behaviors has risen in Alberta LTC facilities during the last 10 years. This is related to the fact that more services are provided to enable the aged to stay in their homes longer. These services, however, are often not sufficient to enable the aged person who has a behavior problem to remain in the community. Therefore, with a higher number of older people with behavior problems entering LTC, the percent of LTC residents with behavior problems continues to rise.

To conclude this segment it must be noted that the respondents indicated a high learning need in the skill area. The most highly rated needs are reflective of current trends in nursing skill requirements for R.N.s who work in LTC.

Feeling Needs

The means for feeling needs varied for both groups as indicated in Table 12. For the administrators, the means were above three for 70% of the items whereas the means ranged above three in only 40% of the items responded to by R.N.s.. However, although feeling needs received a lower rating by the groups, stastically significant differences between administrators and R.N.s existed in eight out of nine of the items (78%). In all cases administrators rated these needs higher than did R.N.s.

Table 12

Group Comparison of R.N.s' Feeling Needs

	Administrators	R.N.s		
Item	$\bar{X}$	$\bar{X}$	t	p
Appreciate feelings on admission	3.47	3.01	-2.78	.00
More congenial	3.01	2.49	-3.17	.00
Understand residents' feelings about LTC	3.57	3.20	-2.43	.02
Respect residents more	2.97	2.51	-2.63	.01
More patient	2.99	2.69	-1.68	.09
More caring	2.95	2.43	-2.93	.00
Encourage aged re abilities	3.48	3.04	-2.64	.01
More diligent to learn	3.51	3.13	-2.42	.02
Feel more united with team	4.22	3.40	-2.71	.00

Although there were only ten items listed under feeling needs, interestingly enough, the five most highly rated topics were identical for the two referent groups and appeared in exactly the same order. These topics were:

1. The need for R.N.s to try harder to understand how established residents feel about aspects of life in LTC
2. The need for R.N.s to be more diligent in learning about care of the aged
3. The need for R.N.s to encourage the aged more regarding their abilities
4. The need for R.N.s to appreciate more, the feelings of residents on admission
5. The need for R.N.s to feel more united with the health care team.

Other feeling needs. In Table 13, the most frequently mentioned comments indicated a need for R.N.s to feel more empathetic (18), compassionate (7), affectionate or loving (4), confident (4), caring (3) and less pressed for time (3). Although empathy and caring were already included in the questionnaire topics, they were further emphasized by both groups identifying them as other feeling needs. Interestingly, "less pressed for time" was included under this category just as time management was highlighted under other skill needs. The first two needs outlined by the groups were feeling needs towards residents, while the next two feeling needs were towards the R.N.s themselves.

Table 13

R.N.s' Other Feeling Needs

Item	Frequency
Empathetic	18
Sympathetic	1
Protective	1
Affectionate/loving	4
Interested in residents	1
Sense of humor	2
Confident	4
Compassionate	7
Pride in caring	1
Tolerant	1
Accepting	1
Approachable	2
Less pressed for time	3
Accepting of cultural differences	1
Responsive	1
Job satisfaction	1
Caring	3
Assertive	2
Objective	1

Aggregated Knowledge, Skill, and Feeling Needs

Aggregated variables of knowledge need, skill need, and feeling need were developed by combining the relevant items from the questionnaire.

Comparison of Knowledge, Skill, and Feeling Needs by Sub-group

The new variables were compared by sub-group as per Table 14.

Table 14

Comparison of Knowledge, Skill, and Feeling Needs by Sub-group

	Administrators	R.N.s		
Variable	$\bar{X}$	$\bar{X}$	t	p
Knowledge Needs	3.79	3.69	-1.15	.25
Skill Needs	3.80	3.60	-1.77	.08
Feeling Needs	3.28	2.83	-3.31	.00

In all cases, administrators rated needs higher than R.N.s, but only one comparison was statistically significant. The difference in perception of feeling needs between the groups was significant at the .01 level.

A Pearson product moment correlation test was performed on the aggregated knowledge, skill, and feeling variables. The Pearson correlation coefficient between knowledge needs and skill needs was .79. Between skill needs and feeling needs, the coefficient was .63. Also noteworthy was the correlation between feeling needs and knowledge needs which was .51. As indicated in Table 15, all were significant at the .01 level.

Table 15

Correlations between Knowledge, Skill, and Feeling Variables

Variables	r	p
Knowledge-Skill	.79	.01
Skill-Feeling	.63	.01
Feeling-Knowledge	.51	.01

Thus the three variables were highly intercorrelated. Therefore, if an individual perceived a learning need in one area, there was a high probability that the person would perceive a learning need in another domain.

From this information, it may be concluded that what characterizes a respondent is the level of learning need rather than the learning need by specific area. Furthermore, needs for inservice education are generalized feelings of need rather than particularized feelings of need. Therefore, people who have a higher perception of needs will be more attracted to programs almost regardless of the topic, while those who do not feel needs, will not be so enticed. These findings, which were not alluded to in the literature, have implications for the education coordinator with respect to the importance of the motivator role in presenting inservice education.

Inservice Format Preferences

Eleven administrative options for the delivery of inservice education were rated by respondents. These are listed in order of support by R.N.s in Table 14. Means varied from 2.05 to 4.59.

Group Comparisons of Inservice Format Preferences for R.N.s

The means for administrators ranged from 2.40 to 4.59 while the means for R.N.s ranged from 2.05 to 4.29. The most highly rated format preferences of R.N.s included repeated on different shifts, videotaped to

enable viewing as time permits, one day inservices, and half day inservices. The first two preferences indicate that flexibility of inservice is important. The high ratings of one day and half day inservices suggest that R.N.s recognize the importance of inservice separate from scheduled work hours.

Of the top five ratings of both groups, three were similar: repeated on different shifts, videotaped to enable viewing as time permits, and one hour inservices. Of the five significant differences between administrators and R.N.s, all demonstrated higher ratings by administrators (see Table 16).

Other Inservice Format Preferences

Several other format preferences were recorded by the respondents. As indicated in Table 17 the most emphasized items listed included time allocation for inservices (7), inservices between 1400 and 1600 hours (3), and inexpensive programs (3). The time problem, which has been previously noted, has again been highlighted.

Table 16

Group Comparisons of Inservice Format Preferences for R.N.s

Inservice	Administrators $\bar{X}$	R.N.s $\bar{X}$	t	p
Repeated on different shifts	4.59	4.29	-2.52	.01*
Videotaped	4.18	3.89	-1.72	.09
One day	3.50	3.66	0.84	.40
Half day	2.97	3.32	1.70	.09
One hour	3.64	3.28	-1.71	.09
Self study	3.62	3.14	-2.62	.01*
Afternoon: 1300-1500	3.76	2.98	-3.73	.00*
Half hour	3.44	2.73	-3.20	.00*
Two days	2.40	2.68	1.39	.17
Teleconference	2.46	2.38	-0.41	.68
Morning: 1000-1200	2.48	2.05	-2.27	.02*

Note. *$p \leq .05$

Table 17

Other Inservice Format Preferences

Inservice	Frequency
Travelling workshops	1
Repeated more than once per week	1
Formalized seminars	1
Inexpensive programs	3
Scheduled well ahead of time	2
Self-study with inservice	1
Increased funding for inservice	2
Gerontology magazines	1
Time allocation for inservice	7
Participatory inservice	2
5 days	2
More inservices	2
Inservices with exams	2
Flexible inservices	1
Material on bulletin board	1
More variety	1
Programs separate from work day	2
On public television	1
1400-1600 hours	3
Based on a needs assessment	1

From the great variety of responses it may be concluded that administrators and R.N.s have suggestions to make inservice programs more effective, and thus they should be consulted by inservice coordinators. It is also apparent that flexibility and time allocation are important considerations.

Analysis by R.N. Characteristics

Significant Differences of Perceptions of Learning Needs by Full-time or Part-time R.N.s

Table 18 outlines the differences of perceptions of learning needs by full-time or part-time R.N.s. Of the 88 learning need items, 11 were perceived differently between full-time and part-time R.N. groups at the .05 or less level of significance. More interesting, however, is the fact that in all instances full-time R.N.s perceived a greater learning need than did part-time R.N.s.

Table 18

Significant Differences of Perceptions of Learning Needs by Full-time or Part time R.N.s

	F/T (n=53)	P/T (n=140)		
Item	$\bar{X}$	$\bar{X}$	t	p
Role of team members (1>2)	3.42	3.00	2.17	.03
Nutrition for the aged (1>2)	3.92	3.51	2.51	.01
Sociological assessment of the aged (1>2)	4.11	3.73	2.88	.01
Alzheimers Disease (1>2)	4.40	4.11	2.13	.04*
Teaching NAs & RNAs (1>2)	3.94	3.52	2.20	.03
Communicating with NAs & RNAs (1>2)	3.94	3.46	2.40	.01
Participating as a team member (1>2)	3.68	3.22	2.26	.03
Communicating with relatives (1>2)	4.02	3.63	2.14	.03
Managing difficult behavior (1>2)	4.45	4.15	2.06	.04
R.N.s should be more congenial (1>2)	2.77	2.38	1.97	.05
R.N.s. should be more caring (1>2)	2.72	2.30	1.97	.05

Significant Differences of Perceptions of Learning Needs of R.N.s by Years of Nursing Work Experience

A t-test was performed between the R.N.s who had worked 10 years or less in nursing and those R.N.s who had completed 11 years or more of nursing experience. These groupings were chosen because few R.N. respondents fell within the categories of least experience.

Since only four of 88 items show any significant differences, and there appears to be no pattern, years of experience seems to be unrelated to perceived learning needs. Table 19 displays this information.

Table 19

Significant Differences of Perceptions of Learning Needs of R.N.s by Years of Nursing Work Experience

	10 yrs./less (n = 63)	11 yrs./more (n = 131)		
Item	$\bar{X}$	$\bar{X}$	t	p
Psychological assessment of the aged	4.25	3.98	2.05	.04
Government requirements of care for the aged	3.51	3.88	-2.12	.04
R.N.s need to feel more congenial to residents	2.22	2.62	-2.13	.04
Preference for half day inservices	3.65	3.15	2.31	.02

Significant Differences of Perceptions of Learning Needs of R.N.s by Years of Experience in Gerontology

To determine the significant differences among the five groupings of respondents by work experience in gerontology, an analysis of variance was performed. Seven out of 88 variables showed significant differences as indicated in Table 20. In all comparisons, Group 4 (eight to 10 years) appeared to have the lowest level of learning need. This information suggests that R.N.s have greater learning needs in the early and later years of their career in gerontology than they do in the eight to 10 year period. Perhaps nurses new to the field of gerontology lack information. Then, once they have been in the gerontology field more than 11 years, their earlier skills become outdated, thereby resulting in a higher need for learning.

Significant Differences of Perceptions of Learning Needs of R.N.s by Level of Education

When R.N.s were grouped by level of education (diploma and beyond diploma), only one of 88 comparisons was statistically significant. R.N.s with only a diploma expressed a higher learning need on ethical aspects of resuscitation.

It was concluded therefore that perception of learning needs in gerontology is not related to the level of formal preparation in nursing.

Table 20

Significant Differences of Perceptions of Learning Needs of R.N.s by Years of Experience in Gerontology

Item	Group 1 (less than 2 yr) $\bar{X}$	Group 2 (2-4 yrs) $\bar{X}$	Group 3 (5-7 yrs) $\bar{X}$	Group 4 (8-10 yrs) $\bar{X}$	Group 5 (over 11 yrs) $\bar{X}$	F	p	Comparison
Falls & restraints	3.93	3.83	4.05	3.18	3.76	3.28	.01	3 > 4
Nutrition for the aged	3.48	3.83	3.88	3.15	3.67	2.53	.04	3 > 4
Drug therapy & interactions	4.58	4.50	4.38	3.76	4.39	5.01	.00	3 > 4 5 > 4 2 > 4 1 > 4
Heart & blood vessel disease	3.26	3.75	3.69	3.09	3.69	3.59	.01	5 > 4 2 > 4
Spiritual needs	3.59	3.25	3.38	3.06	3.75	2.81	.03	5 > 4
Evaluating care	3.96	3.88	3.40	3.18	3.86	3.96	.00	5 > 4 2 > 4 1 > 4
Preference for 2 day inservices	2.35	2.27	2.28	2.41	2.95	3.52	.01	2 > 3

Note. Group 1 (n = 26); Group 2 (n = 40); Group 3 (n = 42); Group 4 (n = 34); Group 5 (n = 51)

Significant Differences of Perceptions of Learning Needs of R.N.s by Inservice Hours in Gerontology

By number of inservice hours in gerontology programming in the last two years respondents fell into five groups ranging from no hours to 30 hours. Table 21 depicts the differences.

Through analysis of variance, seven of the 88 variables are shown as being significantly different. The pattern indicates that groups with more inservice showed greater learning needs than did groups with less inservice.

Two possibilities exist in the interpretation of this pattern. First, inservice programs may create needs. Second, it may be that those R.N.s with higher learning needs attended more inservice programs. Both explanations are quite reasonable. Often knowledge of a subject creates a thirst for further information. Also, if attendance at inservice is voluntary, those who perceive learning needs may be more motivated to attend.

Analysis by Facility Characteristics

R.N.s were also categorized by various facility characteristics such as funding, length of operation, and size.

Perceived Learning Needs of R.N.s by Funding of Employing Facility

Perceived learning needs of R.N.s by funding of employing facility

Table 21

Significant Differences of Perceptions of Learning Needs of R.N.s by Inservice Hours in Gerontology

Item	Group 1 (no hrs) $\bar{X}$	Group 2 (1-10 hrs) $\bar{X}$	Group 3 (11-20 hrs) $\bar{X}$	Group 4 (21-30 hrs) $\bar{X}$	Group 5 (over 30) $\bar{X}$	F	p	Comparison
Culturally determined behavior	3.63	3.62	4.21	3.48	4.07	3.66	.01	3>2
R.N.s more congenial	2.43	2.40	2.00	2.81	3.00	3.12	.02	5>3
R.N.s more patient	2.55	2.61	2.24	3.33	2.97	2.84	.03	4>3
Preference for 2 day inservices	2.86	2.69	2.20	2.26	3.32	2.69	.03	5>3
Preference for 1 hour services	2.64	3.47	3.53	4.00	3.15	3.79	.01	4>1
Inservice on videotape	3.66	3.92	4.24	3.81	4.38	3.96	.00	3>1 5>1
Repeated on different shifts	3.95	4.29	4.48	4.19	4.69	2.51	.04	5>1

Note. Group 1 (n = 42); Group 2 (n = 62); Group 3 (n = 34); Group 4 (n = 21) Group 5 (n = 20)

are displayed in Table 22. Although only three variables were significantly different between R.N.s from publicly funded and from privately funded facilities in each case the need was greater in the publicly funded facility. Since many privately funded LTC facilities are religiously based and may be more attuned to meeting the spiritual needs of residents, R.N.s in these facilities may have less of a learning need related to such matters. In addition, because spiritual needs are highly relevant to death and dying, the same reasoning may explain the lower perception of need among R.N.s in privately funded facilities in relation to palliative care. Perhaps more volunteers in the recreation department of privately funded facilities contribute to the lower perception of need with regards to providing recreation and exercise.

Table 22

Perceived Learning Needs of R.N.s by Funding of Employing Facility

Item	(1) Public (n = 146) $\bar{X}$	(2) Private (n = 46) $\bar{X}$	t	p
Spiritual needs of residents	3.51	3.15	2.01	.05
Providing palliative care	4.00	3.54	2.53	.01
Providing recreation & exercise	3.50	3.07	2.35	.02

Perceived Learning Needs of R.N.s by Age of Facility

Twelve variables show statistically significant differences among respondents when grouped by age of facility. There were four such groups, ranging in age of facility from less than 10 years to 20 years or more (see Table 23).

Generally R.N.s from older facilities felt more need for training. The researcher is not able to offer a possible explanation of these differences since the specific items of need do not bear any clear connection to the condition or lack of facilities.

Perceived Learning Needs of R.N.s by Size of Facility

The size of facility considered in this category was determined by the number of beds. The groups included one to 50 beds, 51 to 100 beds, and 101 beds or more. Seventeen variables were found to be significantly different through analysis of variance. These differences are shown in Table 24.

R.N.s from medium size facilities perceived more learning needs than did other respondents. This finding may be related to the funding pattern of nursing homes wherein facilities with 100 beds or more receive funding for a full-time inservice education coordinator. Therefore, more learning needs can be addressed in large facilities. The very small facilities usually share a full-time inservice coordinator with an acute care hospital and may also be able to provide on-going, informal training as a result of interaction of supervisors and nursing staff. Medium size facilities may fall

Table 23

Perceived Learning Needs of R.N.s by Age of Facility

Item	10 yrs $\bar{X}$	10-14 yrs $\bar{X}$	15-19 yrs $\bar{X}$	20 or more $\bar{X}$	F	p	Comparison
Falls & restraints	3.13	3.54	4.03	3.86	2.94	.03	4 > 3
Incontinence	3.14	2.74	3.19	3.47	3.16	.03	5 > 3
Cognitive Impairment	3.59	3.87	3.89	4.17	2.79	.04	5 > 2
Evaluating care	3.21	3.50	3.51	3.93	4.54	.00	5 > 2
Communicating with doctors	3.24	3.06	3.70	3.75	3.20	.02	5 > 3
Appreciate feelings	3.04	2.52	2.70	3.30	4.59	.00	5 > 4 5 > 3
More patient	2.50	2.16	2.64	2.93	3.01	.03	5 > 3
Encourage re abilities	2.79	2.55	3.17	3.22	2.88	.04	5 > 3
½ hour inservices	2.77	3.67	2.09	2.62	6.31	.00	3 > 4 3 > 5
Videotaped	4.04	4.13	3.32	3.98	3.41	.02	5 > 4 3 > 4
Repeated on different shifts	4.00	4.77	3.91	4.35	4.60	.00	3 > 4 3 > 2
Feeling needs	2.77	2.40	2.81	3.00	3.02	.03	5 > 3

Note. Group 1 (n = 39); Group 2 (n = 31); Group 3 (n = 37); Group 4 (n = 95)

Table 24

Perceived Learning Needs of R.N.s by Size of Facility

Item	(1-50 beds) $\bar{X}$	(51-100 beds) $\bar{X}$	(101 or more) $\bar{X}$	F	p	Comparison
Falls & restraints	3.50	4.09	3.62	4.79	.01	2 > 1 2 > 3
Resident mobility	3.52	4.07	3.71	2.97	.05	2 > 1
Hygiene	2.67	3.45	3.12	5.71	.00	2 > 1
Incontinence	3.14	3.61	3.01	5.12	.01	2 > 3
Cognitive Impairment	3.68	4.18	3.98	3.04	.05	1 > 2
Depression	3.67	4.24	4.06	4.60	.01	2 > 1
Heart & blood vessel disease	3.24	3.73	3.52	3.40	.04	2 > 1
Stroke	3.17	3.76	3.63	4.86	.01	3 > 1 2 > 1
Appreciate feelings on admission	3.19	3.24	2.73	4.04	.02	2 > 3
More congenial	2.45	2.79	2.28	3.27	.04	2 > 3
Understand feelings re LTC	3.05	3.56	2.98	5.61	.00	2 > 3
Respect residents more	2.45	2.86	2.25	4.08	.02	2 > 3
More patient	2.62	3.14	2.37	6.63	.00	2 > 3
More caring	2.43	2.79	2.14	4.59	.01	2 > 3
1 day inservices	4.14	3.62	3.48	3.26	.04	1 > 3
½ hour inservices	2.29	2.58	3.07	3.64	.03	3 > 1
Inservices repeated on different shifts	3.98	4.17	4.54	4.67	.01	3 > 1

Note. Group 1 (n = 41); Group 2 (n = 67); Group 3 (n = 84)

between the two and have neither the advantage of a structured or of an informal inservice program.

Analysis by Resident Flow

Learning Needs by Stage of Resident Flow

The means within the cells of the questionnaire matrix varied narrowly from 3.46 to 3.73. The means of the variables admission, treatment plan, resident care, discharge, and palliative care ranged from 3.57 to 3.60. This indicates that the level of learning needs does not vary throughout the stages of resident flow. It must be remembered, however, that items were not distributed evenly throughout the various stages. For example there are more potential learning needs to be addressed under admission than under treatment plan. This information is displayed in Table 25.

Table 25

Learning Needs by Stage of Resident Flow

	Stage of Resident Flow				
Care Dimension	Adm	Plan	Care	Disch	Pall
Facility administration	3.68	3.71	3.71	3.70	3.73
Supervision of NAs & RNAs	3.51	3.52	3.55	3.49	3.57
Health care team	3.48	3.48	3.50	3.46	3.51
Relatives	3.68	3.71	3.71	3.67	3.63
Physical	3.56	3.56	3.57	3.54	3.58
Medical	3.52	3.51	3.53	3.50	3.53
Psychological	3.55	3.55	3.56	3.54	3.57
Sociological	3.63	3.65	3.66	3.62	3.68
Spiritual	3.59	3.60	3.62	3.57	3.64
Average Mean	3.58	3.59	3.60	3.57	3.60
# of Items	117	99	107	108	108

Note. Adm = Admission; Plan = Treatment Plan; Care = Resident Care; Disch = Discharge; Pall = Palliative Care.

Significant Differences of Perception of Need between Administrators and R.N.s by Stage of Resident Flow

There were significant differences between administrators and R.N.s in how they perceived needs of R.N.s according to stage of resident flow. Administrators rated the learning needs of R.N.s higher in all stages than did R.N.s. This finding agrees with previous findings wherein administrators have rated the learning needs higher. Table 26 displays these findings.

Table 26

Significant Differences between Administrators and R.N.s by Stage of Resident Flow

Care Dimension	Admin	R.N.s	t	p
Admission	3.74	3.51	-2.40	.02
Treatment Plan	3.73	3.53	-2.09	.04
Resident Care	3.73	3.55	-1.97	.05
Discharge	3.72	3.51	-2.22	.03
Palliative Care	3.73	3.54	-1.98	.05

Summary

From the analysis of the data in this chapter, some interesting findings were forthcoming. In the areas of knowledge, skill, and feeling needs, administrators and R.N.s perceived similar high priority needs. Topics relating to time problems were suggested as other topics in three out of four areas (skill, feeling and format). About half of the respondents had participated in 10 hours or less inservice programming in the past two years. Full-time R.N.s perceived a statistically greater learning need in eleven items than did part-time R.N.s while R.N.s with a higher number of inservice hours perceived a higher level of learning need than did R.N.s with a lower number of inservice hours. The correlations indicated that needs for inservice education are generalized feelings of need rather than particularized feelings of need.

Administrators generally rated the needs of R.N.s higher than did the R.N.s. While there were some differences between R.N.s when grouped by demographic characteristics, generally speaking the needs were constant and applied to all respondents.

R.N.s indicated a preference for flexible inservices, inservices separate from scheduled work days, and time allocated for programs.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Chapter 5 contains the summary, conclusions, and recommendations of the study.

Summary

Purpose of the Study

The purpose of the study was to perform an assessment of perceived gerontological learning needs of R.N.s working in LTC facilities in Alberta. From this needs assessment, information could be derived upon which inservice programs could be planned, developed, and implemented to meet the learning needs of R.N.s.

Methodology

Questionnaires were circulated to 94 LTC facilities in Alberta that care mainly for the aged. Different types of questionnaire were used, one for R.N.s and one for administrators. Of the 571 questionnaires which were distributed, return rates of 93 % for administrators, and 42 % for R.N.s were obtained.

The questionnaires asked about demography, knowledge needs, skill needs, feeling needs, and inservice format preferences. Additional comments about needs were invited.

Demographic characteristics of respondents, and perceived learning needs were summarized by frequency. Means tests were performed on perceptions of needs and preferences of various sub-groups.

Aggregated knowledge needs, skill needs, and feeling needs, were created as new variables and correlations were examined.

Learning needs by stage of resident flow were then addressed by creating new variables entitled admission, treatment plan, resident care, discharge, and palliative care. Means tests were performed on each variable to determine highest level of perceived needs according to stage of resident flow. A t-test was performed to detect differences between administrators and R.N.s.

Findings

Findings are summarized by addressing the sub-problems as specified in Chapter 1.

Information in the Literature

Statistics and population projections indicate that Canada's elderly population is increasing quickly. Not enough nurses are trained appropriately or prefer working with the elderly. Although information in

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GERONTOLOGICAL NURSING:
AN ASSESSMENT OF PERCEIVED LEARNING NEEDS

BY

JEAN L. GRESCHUK

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND

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FOR

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled GERONTOLOGICAL NURSING: A LEARNING NEEDS ASSESSMENT submitted by JEAN L. GRESCHUK in partial fulfillment of the requirements for the degree of Master of Education.

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This report is dedicated to the glory of God, with thanksgiving for His provision of strength and health during the conduct of the study.

-Jean L. Greschuk

ABSTRACT

This study in the field of gerontological nursing identified perceived gerontological learning needs of R.N.s employed in long term care facilities in Alberta to obtain information upon which the planning and development of inservice education in gerontological nursing could be based. Two questionnaires were developed based on a conceptual framework outlining learning needs by stage of resident flow. Separate questionnaires were distributed to administrators and R.N.s in one third of the long term care facilities that care mainly for the aged throughout Alberta. Respondents provided information regarding professional and contextual characteristics, perceived knowledge needs, perceived skill needs, perceived feeling (attitude) needs, and program format preferences. Of the 571 questionnaires circulated, 271 were usable and formed the basis of the study.

All responses were summarized by frequency. Means were used to rate learning needs and format preferences. T-tests and analyses of variance were performed where appropriate to determine statistically significant differences in learning need and format preference among respondents with selected characteristics. Knowledge need, skill need, and feeling need variables were then created to which the Pearson correlation coefficient was applied. Also, admission, treatment plan, resident care, discharge, and palliative care variables were created based on the stages of resident flow. T-tests were applied to these variables.

Some significant findings were discovered Many gerontological learning needs perceived as highly important, exist among R.N.s working in long-term care in Alberta. Considerable congruence between administrators and R.N.s existed with respect to the most highly rated learning needs of R.N.s, although administrators tended to give higher ratings. Perceived learning needs of R.N.s remained high throughout the stages of resident flow. However, reported inservice attendance was very low.

From the study, priorities for program development in gerontological nursing were established. Time to attend inservice programming is a problem that needs to be addressed.

This study has provided useful information upon which inservice programming in gerontological nursing in long term care facilities may be based.

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CHAPTER 1

INTRODUCTION

Gerontological nursing is expanding rapidly due to the increasing number of elderly that require nursing care. Many basic nursing programs do not offer courses in gerontology, and those that do lack standardization. Some post basic courses in gerontology are available at a few colleges and universities in Alberta, but few nurses working in long term care (LTC) have availed themselves of this education. Nurses with diverse backgrounds and various experiences work in LTC.

The Canadian Council on Hospital Accreditation (1985) requires that a program be in place for all categories of staff to increase knowledge related to the services offered by long-term care centres. More specifically, the Council outlines that a program of inservice education should provide all employees with the opportunity to keep their job knowledge current and their practices relevant. Furthermore, the program should facilitate the development and improvement of skills and inherent leadership potential (p. 95).

Nurses in LTC are also required to supervise varying levels of nursing assistants. Enhanced teaching, supervision and communication skills are necessary for nurses to optimally fulfill this role. Thus special training is necessary to equip nurses with expertise in gerontological nursing and thereby provide better quality nursing care for the elderly.

Definition of Terms

For the purposes of this study, the following definitions will apply to the specified terms:

Inservice education: Planned professional education beyond the basic nursing program, offered through the employing facility, exclusive of orientation programs.

Gerontology: The study of the aging process including the physical, psychological, social, and spiritual aspects.

Elderly: Persons 65 years of age or older.

Gerontological nursing: Scientific study of the nursing care of the elderly, derived from a specific and evolving body of knowledge pertaining to older persons (Gerontological Nursing Association, 1989, p. 4). Gerontological nursing includes using knowledge of the aging process to design nursing care and services which provide for health, longevity and independence -- or highest level of functioning possible (Werner, 1988, p. 3).

Long term care (LTC) facility for the elderly: A facility where an integrated mix of health, psycho-social support and maintenance services is provided on a prolonged basis to the elderly whose functional capacities are chronically impaired or at risk of impairment (Canadian Hospital Association, 1986, p. 4).

Registered nurse (R.N.): A nurse who has at some time successfully passed the exams necessary to qualify for registration as a nurse and is presently registered with an appropriate body of registration.

Resident: A person who lives in a long-term care facility.

Purposes

Inherent in this study were four purposes. The first purpose was to discover what gerontological learning needs were perceived by the R.N.s employed in LTC facilities in Alberta. The next purpose was to identify what the administrators in these facilities perceived to be the learning needs of R.N.s. The third purpose was to identify discrepancies, should they occur, between the perceptions of the R.N.s and the administrators with respect to learning needs. Finally, the last purpose was to make recommendations regarding inservice programs for LTC facilities based on information forthcoming from this study.

Problem Statement

The purpose of this needs assessment was to obtain data upon which the planning and development of inservice education in gerontological nursing could be based. It was necessary to discover what R.N.s needed to know relative to gerontological nursing. Thus the question was: What are the perceived learning needs of R.N.s who work in Alberta LTC facilities which care mainly for the aged?

Sub-Problems

The sub-problems emerging from the problem statement included the following:

1. What information is available in the literature on gerontological nursing as it relates to the knowledge, skills and attitudes of R.N.s in LTC settings?

2. What gerontological learning needs do R.N.s working in LTC in Alberta perceive with respect to the care of their residents?

3. How do administrators of LTC facilities perceive the learning needs of R.N.s working in LTC?

4. Is there a discrepancy between how R.N.s working on LTC units and administrative staff perceive the R.N.s' learning needs in gerontological nursing?

5. What format do R.N.s and administrators prefer for programs developed to meet the gerontological learning needs?

6. What differences exist in the views of R.N.s when grouped by selected demographic and contextual characteristics concerning perceived gerontological learning needs and preferred program format?

Study Significance

The number of elderly in Canada is increasing. Improved standards of living, better prevention and treatment of diseases, and a reduction of infant mortality are among the major reasons cited for this increase. In North America, the percentage of elderly increased from about 5% of the total population in 1900 to about 9% in 1980 (McPherson, 1983, p. 86). Due to increasing longevity and the baby-boom cohort reaching 65 years of age, it is projected that 17% of our Canadian population will be 65 and

over by the year 2020 (McPherson, 1983, p. 86). Although only 7% of the elderly live in LTC in Alberta (Moore, 1987, p. 2), approximately 20% of them will use LTC facilities at some point in their lives (Institute of Medicine, 1983, p. 171). Thus the demand for gerontological health care is increasing and will continue to increase.

The number of elderly in Alberta is also increasing. In 1986, the median age of Albertans was 29. By 2016, the median age will be between 40 and 36 (Alberta Bureau of Statistics, 1988, p. 6). According to the Committee on Long Term Care for Senior Citizens (1988, p. 1), Alberta has over 190,000 seniors which is about 8% of the population. The number of aged in Alberta is expected to peak at 663,000 or 18.2% of the total population by the year 2031 (Committee on Long Term Care for Senior Citizens, 1988, p. 4).

Long term care facilities are a twentieth century and a western world phenomenon. Caring for the ill elderly was traditionally the responsibility of families. However with increasing numbers of women working, and increased mobility, many of the elderly are left without family support. Thus, the traditional responsibility of caring for the infirm elderly, has been relegated to society at large (Wiberg, 1988, p. 1).

Many nurses are employed in LTC. In Alberta there are 124 total eligible LTC centres (Canadian Hospital Association, 1986, p. 130) of which 94 care mainly for the aged. The number of R.N.s employed in LTC in Alberta is unknown because the Alberta Association of Registered Nurses does not have statistics in this regard. Since most nurses working in LTC

in Alberta are employed in a part-time or casual capacity, the ratio of R.N.s per LTC bed is higher than if the staff quota consisted mainly of full-time R.N.s.

The aged have needs that are as unique as those of any other age cohort in society since, with increasing age, more people experience illness, restricted mobility and reduced self-care capacity (Gioiella, 1986, p. 1). The Alberta Nursing Home Review Panel (1982, p. 18), found that inservice education in nursing homes was inconsistent in quality. Since the Panel believed that the benefits of inservice education included improved care of residents and higher staff morale (p. 18), they recommended "that structured and continuous inservice training programs be provided for staff of all continuing care facilities" (p. 3). In addition because the Panel recognized that in the foreseeable future geriatrics was expected to become the largest single component of private medical practices and public health care, it recommended that "geriatric care be a compulsory subject on the curriculum of medical and nursing students at Alberta universities and colleges."

"Services for older people are only as effective as the people who are planning and providing them" (Provincial Senior Citizens Advisory Council, 1987, p. 24). In 1987, the Provincial Senior Citizens Advisory Council outlined that the lack of gerontological and geriatric content in the curricula of the professional faculties results in some deficiency in the skills of quite a number of people working with the elderly, especially people in the professions such as nursing, medicine, rehabilitation medicine,

psychology and social work. Therefore, they recommended that training programs be developed under the direction of appropriately qualified and interested medical practitioners to give geriatric skills to other health professionals.

The "Mirosh Report" made the recommendation that geriatric and gerontological training for care providers of the elderly be improved. "It is recommended that employers, in conjunction with professional associations, develop inservice training programs and other continuing education opportunities for care providers to enhance their understanding of the skills in caring for the elderly" (The Committee on LTC for Senior Citizens, 1988, p. 65).

"The myth that it does not take much skill or expertise to take care of old people unfortunately still prevails, and old people are still viewed as needing custodial care more than anything else" (Burnside, 1981, p. 13). There is a lag between nursing knowledge and practice for the care of the elderly that is greater than for any other age group (Simms, Pforitz, & Price, 1986, p. 145). The specialty of gerontological nursing has evolved with its specialized technology, knowledge and practice (McCormick, 1983, p. 379).

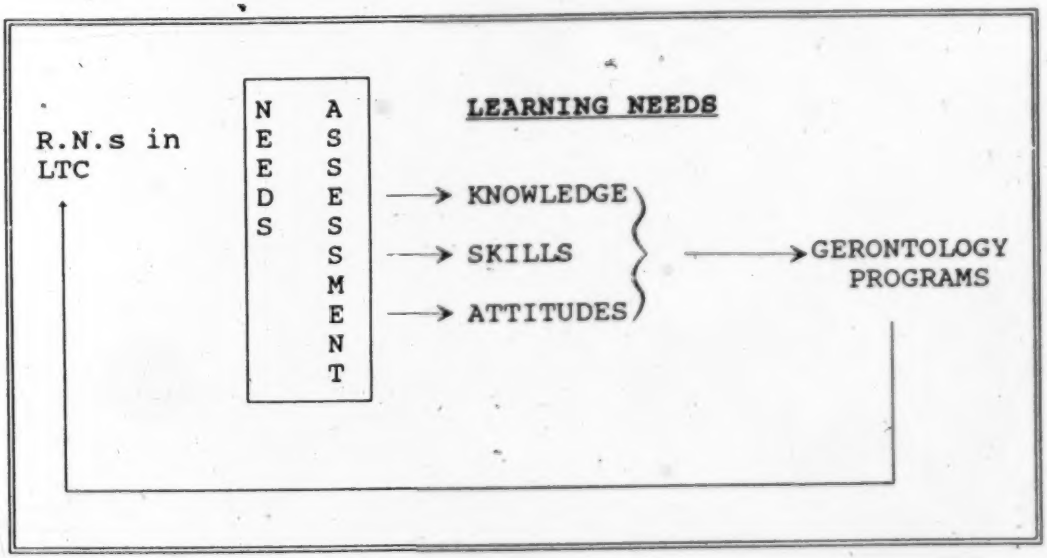
Recently, standards of gerontological nursing have been developed. In May, 1989, the Canadian Gerontological Nursing Association accepted the gerontological nursing standards proposed by the Gerontological Nursing Association Committee of Ontario. Presently, the second draft of the Alberta Gerontological Nursing Standards is under deliberation.

With the increasing number of elderly in Alberta and the apparent inadequate preparation of our nurses, it seems obvious that the learning needs of R.N.s working in LTC in Alberta need to be identified and addressed in order to provide adequate care for the aged in our society.

Conceptual Framework

The related literature suggests that gerontological programs can improve knowledge, skills, and attitudes of nursing staff. A needs assessment can be used to determine what gerontological knowledge, skills and attitudes are needed. This process is represented in Figure 1.

Figure 1. Professional development cycle



According to this model, R.N.s working in LTC will go through a needs assessment to determine their learning needs. Learning needs are differentiated as knowledge needs, skill needs and attitude needs. Based on these assessed needs, gerontology programs could be developed. Once developed, the programs would be presented to the R.N.s. Following program presentation, further needs could then be assessed. Thus the process of identifying needs and preparation of suitable programs to meet those needs would continue throughout the professional development cycle.

Figure 2 outlines learning needs according to the stage of resident flow. In LTC, the resident is admitted, a treatment plan is developed and care is provided. Discharge from the LTC facility or palliative care aimed at relieving symptoms, are also possible parts of the flow.

Throughout the process, certain knowledge, skills and attitudes are required by R.N.s to enable them to provide optimal care to the residents.

Figure 2. Learning needs by stage of resident flow.

ADMISSION 1	TREATMENT PLAN 2	ADMINISTERING RESIDENT CARE 3	DISCHARGE 4	PALLIATIVE CARE 5
KNOWLEDGE SKILLS ATTITUDES	KNOWLEDGE SKILLS ATTITUDES	KNOWLEDGE SKILLS ATTITUDES	KNOWLEDGE SKILLS ATTITUDES	KNOWLEDGE SKILLS ATTITUDES

Many dimensions must be considered in relation to the care of the resident. Figure 3 displays the assumption that resident care may be categorized as organizational or personal. The organizational aspects provide more indirect care for the resident but are of vital importance as they provide a framework which facilitates the more direct personal dimensions of care.

Figure 3. Dimensions of resident care.

ORGANIZATIONAL	PERSONAL
Facility Administration Supervision of N.A.s & R.N.A.s Communication with Health Care Team Communication with Relatives	Physical Medical Psychological Sociological Spiritual

Figure 4 was derived from the three conceptual models outlined. By combining the care dimensions with the stage of resident flow, a questionnaire item matrix was developed that facilitated determination of learning needs according to knowledge, skills and attitudes. This matrix generated 135 categories of items for the questionnaire. For example, the cell meshing relatives and admission contains a knowledge of the role of relatives, communication skills, and an attitude of respect and empathy

towards relatives. Although all categories will have some items, some categories may have many items. Appendix A contains the questionnaire matrix with numbered questionnaire items that pertain to each cell.

Figure 4. Questionnaire item matrix

CARE DIMENSION	STAGE OF RESIDENT FLOW 1	2	3	4	5
	ADMISSION	TREATMENT PLAN	RESIDENT CARE	DISCHARGE	PALLIATIVE CARE
Facility Administration	K S A	K S A	K S A	K S A	K S A
Supervision of NA's and RNA's	K S A	K S A	K S A	K S A	K S A
Health Care Team	K S A	K S A	K S A	K S A	K S A
Relatives	K S A	K S A	K S A	K S A	K S A
Physical	K S A	K S A	K S A	K S A	K S A
Medical	K S A	K S A	K S A	K S A	K S A
Psychological	K S A	K S A	K S A	K S A	K S A
Sociological	K S A	K S A	K S A	K S A	K S A
Spiritual	K S A	K S A	K S A	K S A	K S A

K = Knowledge
S = Skills
A = Attitude

Assumptions

Underlying this needs assessment are the following assumptions:

1. Specific knowledge, skills and attitudes are inherent in the specialty of gerontological nursing.

2. R.N.s working in LTC facilities have perceived learning needs in gerontological nursing.

3. Gerontological learning needs of R.N.s are different from those specializing or practising in other areas of nursing.

4. R.N.s are able to perceive their own learning needs.

5. Administrators are able to perceive the learning needs of R.N.s.

Delimitations and Limitations

The following delimitations and limitations apply to this study:

1. This study focused on the gerontological learning needs of R.N.s working in LTC facilities in Alberta as listed in the Directory of Long-Term Care Centres in Canada, 1986.

2. The LTC facilities concerned care mainly for elderly clients rather than psychiatric, emotionally disturbed, or physically handicapped people of varying ages.

3. Current needs and preferences were the focus of this study rather than future needs and preferences.

4. The study was limited to the responses of the participants from the sampled LTC facilities, received by the researcher within a two month specified period.

5. The study identified learning needs appropriate to programs in inservice education.

6. This study considered the views of administrators and R.N.s in LTC in Alberta, with respect to the perceived learning needs of R.N.s.

Outline of Report

This report is organized into five chapters, the first of which has provided the introduction and background of the study. A review of the literature pertaining to gerontological learning needs appears in Chapter Two, while Chapter Three contains the methodology of the study. In Chapter Four, the data are presented, analyzed and interpreted. To conclude this report, Chapter Five provides a summary of the study, conclusions, and recommendations.

CHAPTER 2

REVIEW OF THE LITERATURE

Many articles and studies addressing gerontology in nursing appear in the literature. This review discusses statistics, attitudes of nurses and student nurses toward the aged, quality of care, gerontological nursing as a specialty, gerontological content of basic nursing programs, effects of gerontological education, learning needs assessments, and preferred gerontological topics for education.

Statistics

Peak health service utilization rates occur above the age of 75 (Moffatt, 1983, p. 1). By 2016, the life expectancy is expected to rise from 73.3 to 78.5 for males and from 80.3 to 83.7 years for females (Alberta Bureau of Statistics, 1988, p. 6). The frail elderly often are not able to care for themselves even with community support services. Children of these people 75 and over are often approaching old age themselves and therefore are unable to provide care. Major cities in Canada are separated by great distances thereby separating families and their older parents who wish to stay in their familiar surroundings (Moffatt, 1983, p. 1). Thus an increased burden to the health care system occurs.

The elderly use more than one third of our total hospital bed capacity while representing less than 10% of the population (Moffatt, 1983,

p. 1). By the year 2,000, 50% of all health care expenses will be related to the care and treatment of our over 65 population (Dychtwald, 1985, p. 65). Because many of the elderly remain in acute care hospitals awaiting placement in LTC facilities, more LTC centres are required. In general, older persons' health problems are chronic, multifaceted and multiple (Speltz, 1982, p. 56).

Attitudes

Society generally devalues age. Butler coined the word "ageism" in referring to the devaluation of older people simply because they are old (1978, p. 4). Society places high value on youth, activity, beauty, and wealth. Consequently, old age is viewed with concomitant loss of health, income, status, and value (Gunter, 1971, p. 466). Such an attitude can indirectly affect the delivery of services to the aged (Keith, 1977, p. 463).

A 1986 report published by the American Nurses Association Council on Gerontological Nursing predicts a 466% increase in demand for nurses prepared in gerontological nursing (cited in Collins & Brown, 1989, p. 10). Unfortunately, the proportion of health personnel who wish to engage in gerontological practice is not increasing accordingly (Tollett & Adamson, 1982, p. 20). Obstacles to increasing the attractiveness of gerontological nursing include prejudicial stereotypes, fear of aging, pessimism about outcomes, weak administrative support, inadequate staffing, and lower salaries, all of which contribute to reduced prestige and excitement in the specialty (Collins & Brown, 1989, p. 9).

Ranking and Burggraf found in their study that 80.4% of nurses currently working with the elderly on a daily basis prefer working with younger patients (1983, p. 273). Few student nurses showed a preference for geriatric nursing (DeLora & Moses, 1969, p. 143; Kayser & Minnigerode, 1975; Knowles & Sarver, 1985). Several studies found that nurses have negative attitudes about caring for the aged (Gillis, 1973, p. 518; Gunter, 1971, p. 467; Taylor & Harned). In a questionnaire administered to a recent graduating class of nurses, 80% of the respondents indicated they "would not" choose a career working primarily with the aged (Collins & Brown, 1989).

In 1971, Campbell studied the attitudes of nursing personnel toward the geriatric patient. This study involved licensed practical nurses (LPNs), nursing assistants (NAs), and R.N.s. Although all three groups preferred working with adults aged 18 to 65 years, LPNs and NAs preferred working with older people more than did R.N.s. Salary increase or shift preference did not significantly increase the willingness to work with the nonpreferred (older) patient. It was therefore recommended that nursing education and inservice training should be structured to attempt to modify or change the stereotyped attitudes held concerning older people. In addition, Campbell suggested that inservice education should be geared to the particular needs and understanding level of the group involved.

Quality of Care

The attitude of caregivers towards a population is an essential component of effective care (Martin & Buckwalter, 1984, p. 53). Keith (1977, p. 463) suggested that the attitudes of professionals affect not only social policy but the quality of care for older persons.

According to a study done by Elliot and Hybertson (1987) the personal and social behaviors of geriatric patients and their degree of functional independence, are related significantly to the feelings nursing personnel expressed about providing care. NAs expressed negative feelings about caring for extremely dependent elderly patients with socially unacceptable and displeasing behaviors (p. 571). Assuming the possibility of a relationship between attitude and quality of care given, the authors recommended two types of inservice education for the NAs. First, they should have education concerning aging and pathology, including behavioral manifestations of age and disease. Second, attitudes need to be isolated from patient care. An awareness of the possible relationship between attitudes and care could lead to more compassionate and sensitive service to geriatric nursing home patients and increased job satisfaction for NAs (p. 571).

Gerontological Nursing as a Specialty

With the frequent permanent or chronic illness experienced by the elderly, treatment is directed towards rehabilitation, retardation of deterioration, or maintenance, rather than cure (Evashwick, 1982, p. 51).

In 1966, nursing recognized geriatrics as a specialized area of practice with the establishment of the American Nurses Association Division of Geriatric Nursing Practice. This name was changed in 1976 to the Division of Gerontological Nursing Practice to permit wider scope in the specialty (Gioiella, 1986, p. 2). The Division has agreed that gerontological nursing practice involves the ability to incorporate an understanding of the following into nursing practice:

--the ramifications of normal aging that may be supported through health promotion

--the different rates at which people age

--the variable characteristics of the older population

--the interrelationship between cultural, social, spiritual, economic, psychological, and biological factors

--the multiplicity and collectiveness of an older person's losses

--the frequently atypical response of the older adult to disease and to the treatment of disease

--the accumulated, often disabling effects of multiple chronic illnesses or degenerative processes

--the cultural values associated with aging and social attitudes towards the older adult (cited in Gioiella, 1986, p. 2).

This nursing specialty is based on a specific and evolving body of knowledge pertaining to the older person encompassing theory, research, and standard practices. Gerontological nurses have a responsibility to

continue their education and to contribute to the testing and expansion of knowledge in this area (Gerontological Nurses Association, 1989, p. 4).

Basic Nursing Education Programs

Gerontological nursing has been slow to expand. For too many years countless surveys, articles and reports have been telling us that the majority of our curricula are weak in gerontological content and presentation (Atchison & Bryant, 1988, p. 1).

A 1986 study found that fewer than 3% of faculty teaching in baccalaureate programs for nurses have graduate preparation in gerontological nursing (Edel, 1986, p. 29). Faraday (1980) found that supportive personnel (physiotherapists, NAs, and LPNs) are required to perform tasks for which they have not been adequately trained. Thus standardization and upgrading of training is a basic requirement. Also, at a national symposium on LTC issues in the United States, respondents in a study rated education overwhelmingly as the most important issue (Miller & Goldman, 1986).

Basic nursing education programs have been slow to include gerontology as a specialty area (English, 1986, p. 31), and it is not tested on Canadian licensure exams.

> The profession of nursing might never have a finer hour than at that point at which it would bring its collective resources to bear upon the issue of the moral responsibility of the society to provide adequate care for its sick and aged citizens. (Yarling, 1977, p. 50)

Effects of Gerontological Education

Nodhturft, Banks and Macmullen (1986) suggested that the use of gerontological education programs can lead to increased knowledge levels and improved attitudes toward the elderly and the aging process (p. 25). Robb (1979) found that a second-level seven week gerontology course resulted in a significant increase in more positive behavioral intentions, but no significant change in beliefs. A study done by Gunter (1971) reported that, after a course in gerontology, fewer students expressed a strong interest in working with the aged. Gomez, Otto, Blattslein and Gomez (1985) investigated the impact of a three week, eight hour per day clinical experience of caring for the ill elderly in nursing homes by baccalaureate students. They found that the students had more positive attitudes toward the elderly after their experience. After a gerontology course with the "well" elderly, nursing students demonstrated an improved attitude in Hart, Freel and Crowell's 1976 study. Also, when an experiment with the "ill" elderly occurred after a guided experience with the "well" elderly, attitudes toward the aged did not decrease significantly.

While a study done by Robb and Malinzak (1986, p. 25) showed that knowledge is not necessarily a sufficient condition to ensure quality practice, other research done by Almquist, Stein, Weiner and Lynn (1981) demonstrated that gerontological educational programming resulted in greater knowledge and more positive attitudes toward the elderly. Nursing directors who participated in Fisher's (1981) study stated that the quality of care in their facilities was positively affected by a course in gerontology.

There is however, no research evidence that inservice education actually produces improved nursing care.

Through use of a quiz, Palmore (1988) reported that as education increased, knowledge about aging increased (p. 36). Also, he found considerable and fairly consistent evidence that knowledge about aging as measured by the Facts on Aging Quiz 1 (FAQ1) has a modest, but significant correlation with attitudes toward aging. More specifically, those people with higher knowledge levels tended to have less negative and more neutral attitudes toward the aged (p. 43). Using this quiz, Greenslade (1986) established that a group of Canadian nurses working with the elderly with no gerontology training scored 61% while those nurses with some post graduate training in gerontology scored 83%.

Although study reports are conflicting, most supported the concept that education is the first step towards improving the quality of care for elderly patients.

Learning Needs Assessment

Betz (1989, p. 40) recommends performing a needs assessment with nurses practicing in gerontology so that suitable programs may be developed. Knowles explains that a learning needs assessment is the process of diagnosing gaps between the present level of competencies and a higher level required for effective performance as defined by a person, an organization, or a society (1980, p. 85). A needs assessment in which learners diagnosed their own learning needs would produce data to

serve as the basis for planning a comprehensive educational program and could also build commitment to the program by the participating staff and management (Bowman, 1987, p. 116).

One of the prime benefits of an educational needs assessment is that staff are more satisfied with the programs offered (Bowman, 1987, p. 116). Bowman discovered that nurses who participated in a needs assessment one year previously, rated their satisfaction with educational programs higher than those who did not participate or who did not remember participating. Chesney and Beck's 1985 study found that nurses who identified a need for continuing education in patient assessment rated themselves as having more skill than nurses who did not identify such a need (p. 41). Canar and Johnson (1986) developed a tool whereby learning needs are identified by measuring gaps between the employees' perceptions of the importance of statements and their ability to meet the need identified in each.

A needs assessment is not only the first step in planning educational programs, but it is also an integral part of an ongoing process of assessment, program development, implementation and evaluation (Bowman, 1987, p. 117). From the literature reviewed, positive reports have been evidenced with respect to needs assessments.

Preferred Gerontological Topics

Various types of research in the nursing field have indicated preferred gerontological topics among the respondents. On the basis of

applicability and interest, student nurses rated topics of Fisher's (1981) course in gerontology. The most important topics included normal physical change and aging; organic brain syndrome; depression and suicide; sensory training, reality orientation, and motivation; bowel and bladder continence and fluid balance; communication disorders; and drugs and the elderly.

In 1982, Headricks designed a study to identify the perceived learning needs of nursing staff in a nursing home setting upon which future educational programs could be constructed. She developed one questionnaire checklist for the perceived learning needs of R.N.s and one for NAs. The three most frequently requested categories of information for R.N.s in order of priority were the following: aging process (with emphasis on death and dying; theories of aging and ways they affect nursing care; and components of aging--physical, psychosocial and social aspects); nursing intervention (including measures and therapies; preventive measures; nutrition and feeding); and managing problems related to the aging process (with emphasis on teaching, demonstration, and exhibits; recreation and exercise; environmental safety and supports). As this needs assessment was performed in only a nursing home setting, Headricks recommended administration of questionnaires in different types of LTC settings (Headricks, 1982, p. 19-20).

A learning needs assessment of LTC staff nurses and administrators was conducted by Werner (1988) in Alberta using a modification of Headrick's (1982) questionnaire. The most highly perceived learning

needs of staff nurses included sexuality, nutrition and feeding, nursing team responsibilities and relationships with NAs, group therapy, peer review process, cancer, social assessment of the elderly, reality therapy, planning, certification of nursing personnel, and health screening. Significant differences existed between how nursing administrators and staff nurses perceived the learning needs of R.N.s on LTC units for the elderly.

Miller (1987) also did a study in Alberta. Using a three round modified Delphi technique, she attempted to identify content on aging for baccalaureate nursing programs. The ten most important items priorized by practicing nurses were work as a member of an interdisciplinary team, assessment of the elderly, medication interventions, medication problems in old age, institutionalization, fluid and electrolyte interventions, safety precautions, relocation problems, discharge planning, and advocacy interventions.

Research was done with community health and nursing home nurses to identify gaps in their basic preparation and their present needs (Volinn, 1982). The most favored topics for continuing education were gerontological changes, drug use and effects, and nursing intervention (p. 107). In addition, 66.2% of the nurses stated that more gerontology theory in their basic education would have been helpful in improving their quality of geriatric care (p. 107).

Using a questionnaire format, Wright (1987) purposed to discover the learning needs of R.N.s and LPNs. For R.N.s, the most desired

educational topics to meet learning needs were medications--classification or interactions, death and dying, legal aspects, resident rights, and physical assessment or management. Although different nursing units reflected different learning needs, a fairly close consensus occurred on a number of topics which could then be used for decision making about programming (p. 11).

Since R.N.s also provide supervision and instruction for NAs and registered nursing assistants (RNAs), Wiberg investigated the duties and training needs of NAs who care for the elderly. She concluded that several skills and procedures required ongoing instruction (1988, p. 109). This instruction would most appropriately be done by a nurse (p. v). Thus ongoing teaching, supervision, and communication skills are required of nurses.

As the topics evolving from the varying needs assessments differed among the studies, its seems obvious that needs assessments must be individualized to the group for whom programs are being planned.

Summary

Through existing statistics and population projections, it becomes readily apparent that Canada's elderly population is increasing quickly. Since people over the age of 75 use health services the most, our health care system must plan appropriately to accommodate this anticipated increased demand. Currently, not enough nurses are trained appropriately or prefer working with the elderly. Although information in the literature is

conflicting, it seems that educationai programs have helped improve attitudes of nurses. Several needs assessments have been done among nursing groups working with the aged and differing preferred topics have been identified. These topics are related to knowledge, skills, attitudes, theory, and issues. Separate groups of people appear to have different learning needs, suggesting that needs assessments should be specific to the nurses for whom educational programs are being planned.

Whereas previous studies have taken an academic approach by identifying curriculum needs, no research to date has focussed on patient flow in the process of determining learning needs. Another area that has not been explored is that of the gerontological learning needs of R.N.s who work in LTC facilities throughout Alberta.

CHAPTER 3

METHODOLOGY

Questionnaire Development

Development of the Instrument

Questionnaire development was based on the conceptual framework which included the professional development cycle, learning needs by stage of resident flow, and dimensions of care (see Figures 1, 2, & 3). After the learning needs by stage of resident flow were emmeshed with the dimensions of resident care to develop a questionnaire matrix (see Figure 4), each cell in the matrix was considered in developing the questions. Appendix A contains this expanded questionnaire matrix with numbered questionnaire items that pertain to each cell. Questions were based on knowledge, skill, and attitude needs. Demographic data also were gathered.

In consultation with people knowledgeable in gerontological nursing, some revisions were made to the initial questionnaire. It was decided that two questionnaires were necessary, one for R.N.s and one for administrators. The "skill needs" section was expanded; the "attitude needs" were made more subjective than analytical; and some clarification of items was required. At this point, the category "attitude needs" was retitled "feeling needs" to cause less intimidation of the participants. It is recognized that "feelings" and "attitudes" are not identical terms. A person

may have a feeling of empathy but an attitude of concern. Feelings are more subjective and thus more attuned to perception.

Coding of questionnaires by facility was considered. The decision was made not to code questionnaires to ensure anonymity of the respondents. Thus it was not possible to state the distribution of responses by facility.

Pilot Study

A pilot study of the questionnaire was carried out with LTC staff in the employing health centre of the researcher. As this was a new LTC facility, it was not listed in the Directory of Long-Term Care Centres in Canada, 1986 from which the study sample was drawn. Thus the sample was not damaged.

Consent to conduct the pilot study was obtained from the Director of Patient Services and the Coordinator of LTC. The researcher attended a LTC meeting and explained the research and R.N. involvement. A letter was drafted explaining the proposed study, administrative support, and the purpose of the pilot study (see Appendix B). Anonymity of responses was assured. Questionnaires with the letter of explanation were circulated in uncoded envelopes to R.N.s and administrators.

Return rate of completed questionnaires for the pilot study was 100%. In total, two administrator and seven R.N. questionnaires were returned. Five questionnaires included questions or suggestions for improvement.

These suggestions were considered worthwhile and incorporated into the revised questionnaire. Some items were clarified (for example, "friendlier" was replaced by "more congenial"). In the "feeling need" category, the word "should" was changed to "need." The revised questionnaire which was used in the main study appears in Appendix C.

Data Collection

Sampling

The target population considered was the total number of R.N.s employed as staff nurses and administrators (directors of care, coordinators, supervisors, head nurses, and educators) in LTC facilities of Alberta that care mainly for the elderly. The 94 gerontological LTC facilities were categorized as small (30 with one to 50 beds), medium (34 with 51 to 100 beds), or large (27 with more than 100 beds). Then a cluster sample of each category of LTC facility in Alberta was systematically selected by including every third LTC facility. All of the nursing administrators and R.N.s employed in these sampled facilities were asked to participate, thereby providing the sample for the study.

Contact

The directors of patient services in the LTC facilities were contacted by phone and by letter (see Appendix D). The purpose of the research

was explained. As only consolidated findings were to be reported, all responses would be treated as confidential and anonymous.

One major LTC facility withheld approval for participation until the study was sanctioned by their research committee. A three week delay thus ensued.

Distribution

Once consent was received verbally, by phone, questionnaires with stamped, self-addressed envelopes and letters explaining the study (see Appendix E) were mailed to the director of patient services or preferred contact person, for distribution during a specific time period. They were to be returned individually, by mail.

Follow-up

Follow-up procedures involved three approaches. First, during a workshop at which many Alberta LTC educators were present, the researcher was invited to explain the research and encourage respondent participation. Then a follow-up letter was circulated to the preferred contact person in each sampled facility (see Appendix F). The third approach involved submitting an article to an LTC Alberta newsletter which outlined the study and encouraged questionnaire return.

A two month period was allowed for questionnaire return. This time period included the follow-up provisions mentioned. These procedures resulted in the following response rate.

Questionnaire Resonse Rate

Table 1 outlines the response rates of R.N.s and administrators. In total, 571 questionnaires were circulated which included 84 for administrators and 487 for R.N.s.

Table 1

Questionnaire Response

	Questionnaires				
Group	#Sent	#Ret'd	%Ret'd	#Usable	%Usable
Administrators	84	78	93	77	92
R.N.s	487	203	42	194	40
Total	571	281	49	271	47

The response rate of administrators was very high (93%). This may indicate that administrators identified the gerontological learning needs assessment as important and worthy of their support.

A lower response rate resulted from the R.N.s (42%). This may be partially related to the study timing (May, June and July) which was during

vacation time for many R.N.s. Also, since most R.N.s in LTC are employed in a part-time capacity, work schedules may have influenced response rate. Thus vacations and part-time scheduling may have resulted in some R.N.s not receiving questionnaires.

Data Analysis

Method of Data Analysis

The statistical computations used in this research were frequencies, percentages, and means, which were generated by the SPSSX package.

First, the demographic characteristics obtained through the questionnaire from the respondents were summarized.

Then, the perceived needs of the participants were summarized. A t-test was used to determine if significant differences in content area existed among respondents with selected characteristics. Analysis of variance followed by the Scheffé procedure was also used to determine if specific characteristics of respondents were significant.

The preferences for program delivery format were summarized. A t-test was then done to determine if statistical differences in delivery preferences existed between respondents according to specific characteristics.

For each respondent, three new variables were then created identified as knowledge need, skill need, and feeling need by combining

the relevant items from the questionnaire. The Pearson correlation coefficient was then applied to the variables.

Since this study was based on a conceptual framework in which learning needs of R.N.s are a function of the stage of LTC resident flow, means were calculated for each cell in the questionnaire matrix. The means were based on both administrator and R.N. responses. New variables entitled admission, treatment plan, resident care, discharge, and palliative care were created. Then means for each variable were calculated to determine the extent of learning needs at each stage of resident flow. A t-test was performed to discover significant differences between administrator and R.N. responses in relation to stage of resident flow. Respondent comments obtained at the end of major need areas were categorized and summarized by the researcher.

CHAPTER 4

RESEARCH FINDINGS

The research findings of this study are divided into five sections. The first part of the chapter presents agency characteristics. Next, respondents' professional characteristics are addressed. The perceptions of learning needs are then discussed followed by analysis of needs according to R.N. characteristics. The last section presents perception of learning needs according to stage of resident flow.

It must be noted that there are various ways of interpreting learning need. A high need could indicate that the item is perceived as important. Also, a high need could mean that the need area is not well developed within the individual (similar to Knowles "gap" theory cited in Chapter 2). Since respondents were not asked specifically to rate each item by importance as well as need, clarification of this dilemma is difficult. The writer has used the second meaning of need in the interpretations.

Agency Characteristics

Table 2 outlines the agency characteristics consistent with the sub-groups of administrators and R.N.s.

Funding

As can be evidenced in Table 2, most administrators (65%) and R.N.s (75%) were employed in facilities which were publicly funded.

Length of Operation

Length of operation was another agency characteristic that was detailed in Table 2. The category of 20 years or more, contained the most respondents for both administrators (65%) and R.N.s (50%).

Number of Beds

In Table 2, the facilities with 101 beds or more had the largest respondent groups for administrators (52%) as well as R.N.s (43%). The smallest respondent groups for administrators (12%) and R.N.s (22%) were from facilities with 50 beds or less.

Table 2

Agency Characteristics by Sub-group

	Administrators		R.N.s	
Characteristic	#	%	#	%
Funding				
Publicly Funded	50	65	146	75
Privately Funded	26	34	46	24
No answer	1	1	2	1
Length of Operation				
Less than 5 years			3	2
5-9 years	6	8	26	13
10-14 years	9	12	31	16
15-19 years	10	13	37	19
20 years or more	50	65	96	50
No answer	2	3	1	1
Number of Beds				
1-50	9	12	42	22
51-100	28	37	67	35
101 or more	40	52	84	43
No answer			1	1

Respondents' Professional Characteristics

Professional characteristics to which respondents were asked to respond included: major role in nursing, employment status, total years of nursing work experience, years of nursing work experience in gerontology, and current level of completed education. In addition, administrators were asked how long they had been in an administrative position while R.N.s were questioned regarding the number of inservice hours in which they had participated. Table 3 contains these data.

Major Role in Nursing

The largest subgroup within the administrator group encompassed supervisors, coordinators, or head nurses (47%). These results are not surprising since fewer directors or nurse educators are employed per facility than are supervisors, coordinators, or head nurses. The largest number of R.N.s reported their role as staff nurse (95%). This again is to be expected since most R.N.s who are not administrators (as specified in this study) are employed as staff nurses.

Employment Status

Most of the administrators (77%) reported working full-time; whereas the majority of the R.N.s stated that they worked part-time (72%). Employing part-time R.N.s offers greater flexibility of scheduling within employing facilities.

Table 3

Professional Characteristics of Respondents

	Administrators		R.N.s	
Characteristic	#	%	#	%
Major role				
Administrator/Director	18	23		
Supervisor/Coordinator /Head Nurse	36	47		
Nurse Educator	21	27		
Staff Nurse			185	95
Other	1	1	7	4
No answer	1	1	2	1
Employment Status				
Full-time	59	77	53	27
Part-time	17	22	140	72
No answer	1	1	1	1
Work Experience				
Less than 2 years			5	3
2-4 years	5	7	12	6
5-7 years	5	7	22	11
8-10 years	6	8	24	12
11 or more years	61	79	131	68
Work Experience in Gerontology				
Less than 2 years	5	7	27	14
2-4 years	11	14	40	21
5-7 years	15	20	42	22
8-10 years	17	22	34	18
11 or more years	29	38	51	26
Education level				
R.N. Diploma	31	40	137	71
Post R.N. Diploma	24	31	28	14
Baccalaureate	18	23	10	5
Masters/Doctorate			2	1
Other	1	1	12	6
No answer	3	4	5	3

Number of Years of Nursing Work Experience

Most administrators (79%) and most R.N.s (68%) reported having 11 or more years of nursing work experience. Only 7 % of administrators and 9% of R.N.s related less than five years of nursing work experience. These findings suggest that more older nurses are employed in the LTC field. Perhaps they prefer the routineness offered by LTC rather than the unpredictability of acute care nursing.

Number of Years of Nursing Work Experience in Gerontology

The largest category of nursing work experience in gerontology is in the 11 or more years group which contains 38% of administrators and 26% of R.N.s. Only 21% of administrators and 35% of R.N.s have under five years experience in gerontology. Since this figure is higher than those respondents with less than five years nursing work experience, it may be assumed that many respondents have nursing experience in other fields as well as in gerontology.

Education Level by Sub-group

Most (71%) R.N.s have no formal academic preparation other than the completion of the R.N. diploma program. As for administrators, 40% have their education at the R.N. diploma level. A baccalaureate degree is the status of 23 % of administrators and 5% of R.N.s. Only two respondents (both R.N.s), reported having a graduate degree. In total,

55% of administrators and 21% of R.N.s have education beyond the R.N. diploma level.

Years in Administration for Administrators

As shown in Table 4, the years in administration varies considerably. As the largest group, the two to five year category contained 29% of the respondents. Many administrators (49%) had been in administration for five years or less while 25% had been administering for six years or more. Only 13% had been in administration for 10 years or more.

It must be noted, however, that many respondents (27%) did not answer this question.

Table 4

Years in Administration for Administrators

Experience	#	%
Less than 2 years	15	20
2-5 years	22	29
6-9 years	9	12
10 years or more	10	13
No answer	21	27

Inservice Education of R.N.s.

As Table 5 illustrates, 22% of R.N.s reported no inservice hours during the last two years and 33% reported one to 10 hours. In total, 55% reported 10 hours or less of inservice attendance. Ten hours of inservice education is quite minimal. This finding could be related to shortage of staff, limited inservice programming or low staff motivation.

Table 5

Inservice Education of R.N.s in Last Two Years

Hours	#	%
None	42	22
1 to 10	63	33
11 to 20	34	18
21 to 30	21	11
More than 30	29	15
No answer	5	3

Perceptions of Learning Needs

The respondents rated their perception of need on a five-point Likert scale. The rating included knowledge needs, skill needs, feeling needs, and format preferences. Possible responses ranged from one (low need), to five (high need). In addition, respondents could indicate other content topics in each of the areas for which they perceived a need.

The range of the mean responses varied within each category for both administrators and R.N.s. In ordering these items, the means for administrators ranged from 2.40 to 4.55 for all areas, whereas for R.N.s, the means ranged from 2.05 to 4.33. The lower the mean for each topic, the less highly rated the topic was as a learning need. Multiple t-tests were performed to determine if statistically significant differences existed between administrators and R.N.s for selected characteristics.

Knowledge Needs

Even though there were only three statistically significant differences between administrator and R.N. ratings, Table 6 displays a general trend towards higher ratings by administrators than by R.N.s. Although the differences in means were small, this suggests a general tendency for administrators to rate needs higher than R.N.s..

Table 6

Group Comparison of R.N.s' Knowledge Needs

Item	Administrators $\bar{X}$	R.N.s $\bar{X}$	t	p
Policies	3.08	2.92	-0.97	.33
Resident rights	3.78	3.57	-1.52	.13
Role of team members	3.36	3.12	-1.49	.14
Theories of aging	3.70	3.57	-0.85	.40
Physical aspects	3.77	3.72	-0.31	.76
Psychological aspects	4.12	4.02	-0.72	.47
Social aspects	3.96	3.82	-1.04	.30
Sexuality and aging	3.88	3.70	-1.23	.22
Losses & grief	3.95	3.94	-0.03	.97
Death & dying	3.83	3.98	1.03	.30
Falls & restraints	4.04	3.76	-1.92	.06
Resident mobility	4.01	3.80	-1.48	.14
Hygiene	3.09	3.13	0.27	.79
Nutrition	3.47	3.63	0.91	.36
Physical assessment	4.09	4.03	-0.47	.64

Table 6 (continued)

Group Comparison of R.N.s' Knowledge Needs

Item	Administrators $\bar{X}$	R.N.s $\bar{X}$	t	p
Psychological assessment	4.21	4.07	-1.15	.25
Sociological assessment	4.04	3.83	-1.69	.09
Spiritual assessment	3.92	3.56	-2.58	.01*
Rehabilitation procedures	3.82	3.77	-0.32	.75
Drug & therapy interactions	4.23	4.33	0.77	.45
Incontinence	3.58	3.25	-2.18	.03*
Hearing impairment	3.34	3.15	-1.24	.22
Vision impairment	3.32	3.13	-1.32	.19
Cognitive impairment	4.18	3.98	-1.48	.14
Diabetes	3.05	3.36	2.12	.04*
Cancer	3.17	3.25	0.64	.52
Depression	4.21	4.04	-1.38	.17
Alzheimer's Disease	4.17	4.19	0.14	.89
Heart & blood vessel disease	3.50	3.54	0.28	.78

Table 6 (continued)

Group Comparison of R.N.s' Knowledge Needs

Item	Administrators $\bar{X}$	R.N.s $\bar{X}$	t	p
Stroke	3.43	3.58	1.10	.27
Suicide	3.75	3.61	-1.08	.28
Ethical aspects	4.32	4.10	-1.79	.08
Legal aspects	4.22	4.05	-1.29	.20
Settling in problems	4.12	3.88	-1.77	.08
Culturally determined behavior	3.87	3.79	-0.60	.55
Awareness of residents' past, present and future	3.89	3.73	-1.21	.23
Spiritual needs	3.64	3.42	-1.56	.12
Standards of care	3.83	3.72	-0.76	.45
Government requirements	3.82	3.76	-0.37	.71

Note. *$p \leq .05$

All of the knowledge needs means except one, were rated above three which was the midpoint of the Likert scale. Administrators perceived all of the knowledge needs for R.N.s above the midpoint of three. The knowledge need with a mean below three was the topic of policies, which was rated as 2.92 by R.N.s.

Table 7 is derived from Table 6 and displays the top rated knowledge needs for each sub-group. Of the top ten knowledge needs identified by both administrators and R.N.s, nine were similar. These similar knowledge needs included ethical aspects of resuscitation, drug therapy and interactions, legal aspects of negligence, depression of the aged, psychological assessment of the aged, cognitive impairment, Alzheimer's disease, psychological aspects of aging, and physical assessment of the aged.

Table 7

Top 10 Knowledge Needs

Administrators	R.N.s
Ethical aspects of resuscitation	Drug therapy and interactions
Drug therapy and interactions	Alzheimer's disease
Legal aspects of negligence	Ethical aspects of resuscitation
Depression of the aged	Psychological assessment of the aged
Psychological assessment the aged	Legal aspects of negligence
Cognitive impairment	Depression of the aged
Alzheimer's disease	Physical assessment of the aged
Settling in problems of new residents	Psychological aspects of aging
Psychological aspects of aging	Cognitive impairment
Physical assessment of of the aged	Death and dying

Other knowledge needs of R.N.s. From the 271 respondents, 33 "other" knowledge needs were mentioned. The most frequently mentioned other knowledge needs were guardianship or trusteeship (4), and the role of the residents' families (4) (Table 8)..

Table 8

R.N.s' Other Knowledge Needs

Item	Frequency
Standards of documentation	1
Negligence-What is it?	1
Problem oriented charting	1
Guardianship/ trusteeship	4
Role of residents' families	4
Informed consents	1
Communication in other languages	1
Dependent adults	1
Family counseling	1
Patient classification	1
Residents'dignity	2
Rights of R.N.s with residents	1
Individuality	2
Constipation	1
Mental Illness	2
Sensory deprivation	1
Interactions between caregivers and residents	1
Interactions between caregivers	1
Quality assurance	1
Alternatives to institutions	1

Table 8 (continued)

R.N.s' Other Knowledge Needs

Item	Frequency
Non-patronizing attitude development	1
Staff burnout	1
Behavior problems	2

In summary, it may be noted that both administrators and R.N.s were aware of high learning needs in the knowledge area. The most highly rated items are reflective of the more current demands placed on R.N.s who work in LTC facilities today.

Skill Needs

The means of the skill needs were all above three for both administrators and R.N.s. A multiple t-test revealed six items that were statistically significant (as shown in Table 9). As was the case for knowledge needs, there was a clear tendency for administrators to rate needs higher than did R.N.s.

Table 9

Group Comparison of R.N.s' Skill Needs

Item	Administrators $\bar{X}$	R.N.s $\bar{X}$	t	p
Matching work assignments	3.64	3.41	-1.50	.13
Supervising NAs & RNAs	3.83	3.54	-1.92	.06
Teaching NAs and RNAs	3.97	3.64	-2.15	.03*
Communicating with NAs and RNAs	3.97	3.59	-2.34	.02*
Coordinating nursing care	3.84	3.51	-2.19	.03*
Evaluating nursing care	4.05	3.66	-2.79	.01*
Participating as a team member	3.62	3.35	-1.62	.11
Communicating with team	3.68	3.36	-1.87	.06
Communicating with residents	3.71	3.51	-1.19	.24
Communicating with doctors	3.45	3.55	0.57	.57
Encouraging participation of relatives in care	3.87	3.78	-0.58	.57
Managing conflict with relatives	4.01	3.94	-0.53	.60

Table 9 (continued)

Group Comparison of R.N.s' Skill Needs

Item	Administrators $\bar{X}$	R.N.s $\bar{X}$	t	p
Communicating with relatives	3.71	3.73	0.12	.91
Listening	3.94	3.66	-1.64	.10
Planning for discharge	3.49	3.24	-1.57	.12
Providing palliative care	3.84	3.90	0.38	.70
Providing recreation and exercise	3.40	3.40	-0.01	.99
Planning nursing care	3.77	3.54	-1.41	.16
Advocating for residents	3.91	3.53	-2.49	.01*
Lifting, transferring and moving residents	3.79	3.56	-1.42	.1[illegible]
Maintaining safety	3.74	3.53	-1.30	.20
Maintaining privacy	3.56	3.44	-0.72	.47
Monitoring wandering	3.91	4.23	-3.10	.00*

Note *$p \leq .05$

Table 10 is derived from Table 9 and displays the top rated skill needs for each subgroup. Eight of the ten most highly rated items for both groups were identical. These common topics included managing difficult behavior, evaluating nursing care, managing conflict with relatives of residents, teaching NAs and RNAs, listening, monitoring wandering behavior, advocating for residents, and encouraging participation of relatives in care.

Other skill needs of R.N.s. The other skill needs outlined in Table 11 which were most highly emphasized by the 13 contributors were managing problem behavior (6) and managing time (2). These two items are linked since management of problem behavior among residents requires more staff time. In addition, time management is probably linked to the current nursing shortage being experienced not only in Alberta, but also throughout Canada and North America. "Managing difficult behavior" was included on the questionnaire and is similar to "managing problem behavior." Since the latter skill was included by both groups under "other skill needs," further emphasis is added to this need.

Table 10

Top 10 Skill Needs

Administrators	R.N.s
Managing difficult behavior	Managing difficult behavior
Evaluating nursing care	Managing conflict with relatives of residents
Managing conflict with relatives of residents	Providing palliative care
Teaching NAs and RNAs	Monitoring wandering behavior
Communicating with NAs and RNAs	Advocating for residents
Listening	Encouraging participation of relatives in care
Monitoring wandering behavior	Communicating with relatives of residents
Advocating for residents	Listening
Encouraging participation of relatives in care	Evaluating nursing care
Coordinating nursing care	Teaching NAs and RNAs

Table 11

R.N.'s Other Skill Needs

Item	Frequency
Managing time	2
Managing diversional activity	1
Managing multicultural & multilingual residents	1
Explaining staff shortage	1
Managing legal responsibilities	1
Advocating for nurses	1
Managing problem behavior	6

The percentage of residents with problem behaviors has risen in Alberta LTC facilities during the last 10 years. This is related to the fact that more services are provided to enable the aged to stay in their homes longer. These services, however, are often not sufficient to enable the aged person who has a behavior problem to remain in the community. Therefore, with a higher number of older people with behavior problems entering LTC, the percent of LTC residents with behavior problems continues to rise.

To conclude this segment it must be noted that the respondents indicated a high learning need in the skill area. The most highly rated needs are reflective of current trends in nursing skill requirements for R.N.s who work in LTC.

Feeling Needs

The means for feeling needs varied for both groups as indicated in Table 12. For the administrators, the means were above three for 70% of the items whereas the means ranged above three in only 40% of the items responded to by R.N.s.. However, although feeling needs received a lower rating by the groups, stastically significant differences between administrators and R.N.s existed in eight out of nine of the items (78%). In all cases administrators rated these needs higher than did R.N.s.

Table 12

Group Comparison of R.N.s' Feeling Needs

Item	Administrators $\bar{X}$	R.N.s $\bar{X}$	t	p
Appreciate feelings on admission	3.47	3.01	-2.78	.00
More congenial	3.01	2.49	-3.17	.00
Understand residents' feelings about LTC	3.57	3.20	-2.43	.02
Respect residents more	2.97	2.51	-2.63	.01
More patient	2.99	2.69	-1.68	.09
More caring	2.95	2.43	-2.93	.00
Encourage aged re abilities	3.48	3.04	-2.64	.01
More diligent to learn	3.51	3.13	-2.42	.02
Feel more united with team	4.22	3.40	-2.71	.00

Although there were only ten items listed under feeling needs, interestingly enough, the five most highly rated topics were identical.for the two referent groups and appeared in exactly the same order. These topics were:

1. The need for R.N.s to try harder to understand how established residents feel about aspects of life in LTC

2. The need for R.N.s to be more diligent in learning about care of the aged

3. The need for R.N.s to encourage the aged more regarding their abilities

4. The need for R.N.s to appreciate more, the feelings of residents on admission

5. The need for R.N.s to feel more united with the health care team.

Other feeling needs. In Table 13, the most frequently mentioned comments indicated a need for R.N.s to feel more empathetic (18), compassionate (7), affectionate or loving (4), confident (4), caring (3) and less pressed for time (3). Although empathy and caring were already included in the questionnaire topics, they were further emphasized by both groups identifying them as other feeling needs. Interestingly, "less pressed for time" was included under this category just as time management was highlighted under other skill needs. The first two needs outlined by the groups were feeling needs towards residents, while the next two feeling needs were towards the R.N.s themselves.

Table 13

R.N.s' Other Feeling Needs

Item	Frequency
Empathetic	18
Sympathetic	1
Protective	1
Affectionate/loving	4
Interested in residents	1
Sense of humor	2
Confident	4
Compassionate	7
Pride in caring	1
Tolerant	1
Accepting	1
Approachable	2
Less pressed for time	3
Accepting of cultural differences	1
Responsive	1
Job satisfaction	1
Caring	3
Assertive	2
Objective	1

Aggregated Knowledge, Skill, and Feeling Needs

Aggregated variables of knowledge need, skill need, and feeling need were developed by combining the relevant items from the questionnaire.

Comparison of Knowledge, Skill, and Feeling Needs by Sub-group

The new variables were compared by sub-group as per Table 14.

Table 14

Comparison of Knowledge, Skill, and Feeling Needs by Sub-group

	Administrators	R.N.s		
Variable	$\bar{X}$	$\bar{X}$	t	p
Knowledge Needs	3.79	3.69	-1.15	.25
Skill Needs	3.80	3.60	-1.77	.08
Feeling Needs	3.28	2.83	-3.31	.00

In all cases, administrators rated needs higher than R.N.s, but only one comparison was statistically significant. The difference in perception of feeling needs between the groups was significant at the .01 level.

A Pearson product moment correlation test was performed on the aggregated knowledge, skill, and feeling variables. The Pearson correlation coefficient between knowledge needs and skill needs was .79. Between skill needs and feeling needs, the coefficient was .63. Also noteworthy was the correlation between feeling needs and knowledge needs which was .51. As indicated in Table 15, all were significant at the .01 level.

Table 15

Correlations between Knowledge, Skill, and Feeling Variables

Variables	r	p
Knowledge-Skill	.79	.01
Skill-Feeling	.63	.01
Feeling-Knowledge	.51	.01

Thus the three variables were highly intercorrelated. Therefore, if an individual perceived a learning need in one area, there was a high probability that the person would perceive a learning need in another domain.

From this information, it may be concluded that what characterizes a respondent is the level of learning need rather than the learning need by specific area. Furthermore, needs for inservice education are generalized feelings of need rather than particularized feelings of need. Therefore, people who have a higher perception of needs will be more attracted to programs almost regardless of the topic, while those who do not feel needs, will not be so enticed. These findings, which were not alluded to in the literature, have implications for the education coordinator with respect to the importance of the motivator role in presenting inservice education.

Inservice Format Preferences

Eleven administrative options for the delivery of inservice education were rated by respondents. These are listed in order of support by R.N.s in Table 14. Means varied from 2.05 to 4.59.

Group Comparisons of Inservice Format Preferences for R.N.s

The means for administrators ranged from 2.40 to 4.59 while the means for R.N.s ranged from 2.05 to 4.29. The most highly rated format preferences of R.N.s included repeated on different shifts, videotaped to

enable viewing as time permits, one day inservices, and half day inservices. The first two preferences indicate that flexibility of inservice is important. The high ratings of one day and half day inservices suggest that R.N.s recognize the importance of inservice separate from scheduled work hours.

Of the top five ratings of both groups, three were similar: repeated on different shifts, videotaped to enable viewing as time permits, and one hour inservices. Of the five significant differences between administrators and R.N.s, all demonstrated higher ratings by administrators (see Table 16).

Other Inservice Format Preferences

Several other format preferences were recorded by the respondents. As indicated in Table 17 the most emphasized items listed included time allocation for inservices (7), inservices between 1400 and 1600 hours (3), and inexpensive programs (3). The time problem, which has been previously noted, has again been highlighted.

Table 16

Group Comparisons of Inservice Format Preferences for R.N.s

Inservice	Administrators $\bar{X}$	R.N.s $\bar{X}$	t	p
Repeated on different shifts	4.59	4.29	-2.52	.01*
Videotaped	4.18	3.89	-1.72	.09
One day	3.50	3.66	0.84	.40
Half day	2.97	3.32	1.70	.09
One hour	3.64	3.28	-1.71	.09
Self study	3.62	3.14	-2.62	.01*
Afternoon: 1300-1500	3.76	2.98	-3.73	.00*
Half hour	3.44	2.73	-3.20	.00*
Two days	2.40	2.68	1.39	.17
Teleconference	2.46	2.38	-0.41	.68
Morning: 1000-1200	2.48	2.05	-2.27	.02*

Note. *$p \leq .05$

Table 17

Other Inservice Format Preferences

Inservice	Frequency
Travelling workshops	1
Repeated more than once per week	1
Formalized seminars	1
Inexpensive programs	3
Scheduled well ahead of time	2
Self-study with inservice	1
Increased funding for inservice	2
Gerontology magazines	1
Time allocation for inservice	7
Participatory inservice	2
5 days	2
More inservices	2
Inservices with exams	2
Flexible inservices	1
Material on bulletin board	1
More variety	1
Programs separate from work day	2
On public television	1
1400-1600 hours	3
Based on a needs assessment	1

From the great variety of responses it may be concluded that administrators and R.N.s have suggestions to make inservice programs more effective, and thus they should be consulted by inservice coordinators. It is also apparent that flexibility and time allocation are important considerations.

Analysis by R.N. Characteristics

Significant Differences of Perceptions of Learning Needs by Full-time or Part-time R.N.s

Table 18 outlines the differences of perceptions of learning needs by full-time or part-time R.N.s. Of the 88 learning need items, 11 were perceived differently between full-time and part-time R.N. groups at the .05 or less level of significance. More interesting, however, is the fact that in all instances full-time R.N.s perceived a greater learning need than did part-time R.N.s.

Table 18

Significant Differences of Perceptions of Learning Needs by Full-time or Part time R.N.s

	F/T (n=53)	P/T (n=140)		
Item	$\bar{X}$	$\bar{X}$	t	p
Role of team members (1>2)	3.42	3.00	2.17	.03
Nutrition for the aged (1>2)	3.92	3.51	2.51	.01
Sociological assessment of the aged (1>2)	4.11	3.73	2.88	.01
Alzheimers Disease (1>2)	4.40	4.11	2.13	.04*
Teaching NAs & RNAs (1>2)	3.94	3.52	2.20	.03
Communicating with NAs & RNAs (1>2)	3.94	3.46	2.40	.01
Participating as a team member (1>2)	3.68	3.22	2.26	.03
Communicating with relatives (1>2)	4.02	3.63	2.14	.03
Managing difficult behavior (1>2)	4.45	4.15	2.06	.04
R.N.s should be more congenial (1>2)	2.77	2.38	1.97	.05
R.N.s should be more caring (1>2)	2.72	2.30	1.97	.05

Significant Differences of Perceptions of Learning Needs of R.N.s by Years of Nursing Work Experience

A t-test was performed between the R.N.s who had worked 10 years or less in nursing and those R.N.s who had completed 11 years or more of nursing experience. These groupings were chosen because few R.N. respondents fell within the categories of least experience.

Since only four of 88 items show any significant differences, and there appears to be no pattern, years of experience seems to be unrelated to perceived learning needs. Table 19 displays this information.

Table 19

Significant Differences of Perceptions of Learning Needs of R.N.s by Years of Nursing Work Experience

Item	10 yrs./less (n = 63) $\bar{X}$	11 yrs./more (n = 131) $\bar{X}$	t	p
Psychological assessment of the aged	4.25	3.98	2.05	.04
Government requirements of care for the aged	3.51	3.88	-2.12	.04
R.N.s need to feel more congenial to residents	2.22	2.62	-2.13	.04
Preference for half day inservices	3.65	3.15	2.31	.02

Significant Differences of Perceptions of Learning Needs of R.N.s by Years of Experience in Gerontology

To determine the significant differences among the five groupings of respondents by work experience in gerontology, an analysis of variance was performed. Seven out of 88 variables showed significant differences as indicated in Table 20. In all comparisons, Group 4 (eight to 10 years) appeared to have the lowest level of learning need. This information suggests that R.N.s have greater learning needs in the early and later years of their career in gerontology than they do in the eight to 10 year period. Perhaps nurses new to the field of gerontology lack information. Then, once they have been in the gerontology field more than 11 years, their earlier skills become outdated, thereby resulting in a higher need for learning.

Significant Differences of Perceptions of Learning Needs of R.N.s by Level of Education

When R.N.s were grouped by level of education (diploma and beyond diploma), only one of 88 comparisons was statistically significant. R.N.s with only a diploma expressed a higher learning need on ethical aspects of resuscitation.

It was concluded therefore that perception of learning needs in gerontology is not related to the level of formal preparation in nursing.

Table 20

Significant Differences of Perceptions of Learning Needs of R.N.s by Years of Experience in Gerontology

Item	Group 1 (less than 2 yr) $\bar{X}$	Group 2 (2-4 yrs) $\bar{X}$	Group 3 (5-7 yrs) $\bar{X}$	Group 4 (8-10 yrs) $\bar{X}$	Group 5 (over 11 yrs) $\bar{X}$	F	p	Comparison
Falls & restraints	3.93	3.83	4.05	3.18	3.76	3.28	.01	3 > 4
Nutrition for the aged	3.48	3.83	3.88	3.15	3.67	2.53	.04	3 > 4
Drug therapy & interactions	4.58	4.50	4.38	3.76	4.39	5.01	.00	3 > 4 5 > 4 2 > 4 1 > 4
Heart & blood vessel disease	3.26	3.75	3.69	3.09	3.69	3.59	.01	5 > 4 2 > 4
Spiritual needs	3.59	3.25	3.38	3.06	3.75	2.81	.03	5 > 4
Evaluating care	3.96	3.88	3.40	3.18	3.86	3.96	.00	5 > 4 2 > 4 1 > 4
Preference for 2 day inservices	2.35	2.27	2.28	2.41	2.95	3.52	.01	2 > 3

Note. Group 1 (n = 26); Group 2 (n = 40); Group 3 (n = 42); Group 4 (n = 34); Group 5 (n = 51)

Significant Differences of Perceptions of Learning Needs of R.N.s by Inservice Hours in Gerontology

By number of inservice hours in gerontology programming in the last two years respondents fell into five groups ranging from no hours to 30 hours. Table 21 depicts the differences.

Through analysis of variance, seven of the 88 variables are shown as being significantly different. The pattern indicates that groups with more inservice showed greater learning needs than did groups with less inservice.

Two possibilities exist in the interpretation of this pattern. First, inservice programs may create needs. Second, it may be that those R.N.s with higher learning needs attended more inservice programs. Both explanations are quite reasonable. Often knowledge of a subject creates a thirst for further information. Also, if attendance at inservice is voluntary, those who perceive learning needs may be more motivated to attend.

Analysis by Facility Characteristics

R.N.s were also categorized by various facility characteristics such as funding, length of operation, and size.

Perceived Learning Needs of R.N.s by Funding of Employing Facility

Perceived learning needs of R.N.s by funding of employing facility

Table 21

Significant Differences of Perceptions of Learning Needs of R.N.s by Inservice Hours in Gerontology

Item	Group 1 (no hrs) $\bar{X}$	Group 2 (1-10 hrs) $\bar{X}$	Group 3 (11-20 hrs) $\bar{X}$	Group 4 (21-30 hrs) $\bar{X}$	Group 5 (over 30) $\bar{X}$	F	p	Comparison
Culturally determined behavior	3.63	3.62	4.21	3.48	4.07	3.66	.01	3 > 2
R.N.s more congenial	2.43	2.40	2.00	2.81	3.00	3.12	.02	5 > 3
R.N.s more patient	2.55	2.61	2.24	3.33	2.97	2.84	.03	4 > 3
Preference for 2 day inservices	2.86	2.69	2.20	2.26	3.32	2.69	.03	5 > 3
Preference for 1 hour services	2.64	3.47	3.53	4.00	3.15	3.79	.01	4 > 1
Inservice on videotape	3.66	3.92	4.24	3.81	4.38	3.96	.00	3 > 1 5 > 1
Repeated on different shifts	3.95	4.29	4.48	4.19	4.69	2.51	.04	5 > 1

Note. Group 1 (n = 42); Group 2 (n = 62); Group 3 (n = 34); Group 4 (n = 21) Group 5 (n = 20)

are displayed in Table 22. Although only three variables were significantly different between R.N.s from publicly funded and from privately funded facilities in each case the need was greater in the publicly funded facility. Since many privately funded LTC facilities are religiously based and may be more attuned to meeting the spiritual needs of residents, R.N.s in these facilities may have less of a learning need related to such matters. In addition, because spiritual needs are highly relevant to death and dying, the same reasoning may explain the lower perception of need among R.N.s in privately funded facilities in relation to palliative care. Perhaps more volunteers in the recreation department of privately funded facilities contribute to the lower perception of need with regards to providing recreation and exercise.

Table 22

Perceived Learning Needs of R.N.s by Funding of Employing Facility

Item	(1) Public (n = 146) $\bar{X}$	(2) Private (n = 46) $\bar{X}$	t	p
Spiritual needs of residents	3.51	3.15	2.01	.05
Providing palliative care	4.00	3.54	2.53	.01
Providing recreation & exercise	3.50	3.07	2.35	.02

Perceived Learning Needs of R.N.s by Age of Facility

Twelve variables show statistically significant differences among respondents when grouped by age of facility. There were four such groups, ranging in age of facility from less than 10 years to 20 years or more (see Table 23).

Generally R.N.s from older facilities felt more need for training. The researcher is not able to offer a possible explanation of these differences since the specific items of need do not bear any clear connection to the condition or lack of facilities.

Perceived Learning Needs of R.N.s by Size of Facility

The size of facility considered in this category was determined by the number of beds. The groups included one to 50 beds, 51 to 100 beds, and 101 beds or more. Seventeen variables were found to be significantly different through analysis of variance. These differences are shown in Table 24.

R.N.s from medium size facilities perceived more learning needs than did other respondents. This finding may be related to the funding pattern of nursing homes wherein facilities with 100 beds or more receive funding for a full-time inservice education coordinator. Therefore, more learning needs can be addressed in large facilities. The very small facilities usually share a full-time inservice coordinator with an acute care hospital and may also be able to provide on-going, informal training as a result of interaction of supervisors and nursing staff. Medium size facilities may fall

Table 23

Perceived Learning Needs of R.N.s by Age of Facility

Item	10 yrs $\bar{X}$	10-14 yrs $\bar{X}$	15-19 yrs $\bar{X}$	20 or more $\bar{X}$	F	p	Comparison
Falls & restraints	3.13	3.54	4.03	3.86	2.94	.03	4 > 3
Incontinence	3.14	2.74	3.19	3.47	3.16	.03	5 > 3
Cognitive Impairment	3.59	3.87	3.89	4.17	2.79	.04	5 > 2
Evaluating care	3.21	3.50	3.51	3.93	4.54	.00	5 > 2
Communicating with doctors	3.24	3.06	3.70	3.75	3.20	.02	5 > 3
Appreciate feelings	3.04	2.52	2.70	3.30	4.59	.00	5 > 4 5 > 3
More patient	2.50	2.16	2.64	2.93	3.01	.03	5 > 3
Encourage re abilities	2.79	2.55	3.17	3.22	2.88	.04	5 > 3
½ hour inservices	2.77	3.67	2.09	2.62	6.31	.00	3 > 4 3 > 5
Videotaped	4.04	4.13	3.32	3.98	3.41	.02	5 > 4 3 > 4
Repeated on different shifts	4.00	4.77	3.91	4.35	4.60	.00	3 > 4 3 > 2
Feeling needs	2.77	2.40	2.81	3.00	3.02	.03	5 > 3

Note. Group 1 (n = 39); Group 2 (n = 31); Group 3 (n = 37); Group 4 (n = 95)

Table 24

Perceived Learning Needs of R.N.s by Size of Facility

Item	(1-50 beds) $\bar{X}$	(51-100 beds) $\bar{X}$	(101 or more) $\bar{X}$	F	p	Comparison
Falls & restraints	3.50	4.09	3.62	4.79	.01	2 > 1 2 > 3
Resident mobility	3.52	4.07	3.71	2.97	.05	2 > 1
Hygiene	2.67	3.45	3.12	5.71	.00	2 > 1
Incontinence	3.14	3.61	3.01	5.12	.01	2 > 3
Cognitive Impairment	3.68	4.18	3.98	3.04	.05	1 > 2
Depression	3.67	4.24	4.06	4.60	.01	2 > 1
Heart & blood vessel disease	3.24	3.73	3.52	3.40	.04	2 > 1
Stroke	3.17	3.76	3.63	4.86	.01	3 > 1 2 > 1
Appreciate feelings on admission	3.19	3.24	2.73	4.04	.02	2 > 3
More congenial	2.45	2.79	2.28	3.27	.04	2 > 3
Understand feelings re LTC	3.05	3.56	2.98	5.61	.00	2 > 3
Respect residents more	2.45	2.86	2.25	4.08	.02	2 > 3
More patient	2.62	3.14	2.37	6.63	.00	2 > 3
More caring	2.43	2.79	2.14	4.59	.01	2 > 3
1 day inservices	4.14	3.62	3.48	3.26	.04	1 > 3
½ hour inservices	2.29	2.58	3.07	3.64	.03	3 > 1
Inservices repeated on different shifts	3.98	4.17	4.54	4.67	.01	3 > 1

Note. Group 1 (n = 41); Group 2 (n = 67); Group 3 (n = 84)

between the two and have neither the advantage of a structured or of an informal inservice program.

Analysis by Resident Flow

Learning Needs by Stage of Resident Flow

The means within the cells of the questionnaire matrix varied narrowly from 3.46 to 3.73. The means of the variables admission, treatment plan, resident care, discharge, and palliative care ranged from 3.57 to 3.60. This indicates that the level of learning needs does not vary throughout the stages of resident flow. It must be remembered, however, that items were not distributed evenly throughout the various stages. For example there are more potential learning needs to be addressed under admission than under treatment plan. This information is displayed in Table 25.

Table 25

Learning Needs by Stage of Resident Flow

	Stage of Resident Flow				
Care Dimension	Adm	Plan	Care	Disch	Pall
Facility administration	3.68	3.71	3.71	3.70	3.73
Supervision of NAs & RNAs	3.51	3.52	3.55	3.49	3.57
Health care team	3.48	3.48	3.50	3.46	3.51
Relatives	3.68	3.71	3.71	3.67	3.63
Physical	3.56	3.56	3.57	3.54	3.58
Medical	3.52	3.51	3.53	3.50	3.53
Psychological	3.55	3.55	3.56	3.54	3.57
Sociological	3.63	3.65	3.66	3.62	3.68
Spiritual	3.59	3.60	3.62	3.57	3.64
Average Mean	3.58	3.59	3.6[illegible]	3.57	3.60
# of Items	117	99	107	108	108

Note. Adm = Admission; Plan = Treatment Plan; Care = Resident Care; Disch = Discharge; Pall = Palliative Care.

Significant Differences of Perception of Need between Administrators and R.N.s by Stage of Resident Flow

There were significant differences between administrators and R.N.s in how they perceived needs of R.N.s according to stage of resident flow. Administrators rated the learning needs of R.N.s higher in all stages than did R.N.s. This finding agrees with previous findings wherein administrators have rated the learning needs higher. Table 26 displays these findings.

Table 26

Significant Differences between Administrators and R.N.s by Stage of Resident Flow

Care Dimension	Admin	R.N.s	t	p
Admission	3.74	3.51	-2.40	.02
Treatment Plan	3.73	3.53	-2.09	.04
Resident Care	3.73	3.55	-1.97	.05
Discharge	3.72	3.51	-2.22	.03
Palliative Care	3.73	3.54	-1.98	.05

Summary

From the analysis of the data in this chapter, some interesting findings were forthcoming. In the areas of knowledge, skill, and feeling needs, administrators and R.N.s perceived similar high priority needs. Topics relating to time problems were suggested as other topics in three out of four areas (skill, feeling and format). About half of the respondents had participated in 10 hours or less inservice programming in the past two years. Full-time R.N.s perceived a statistically greater learning need in eleven items than did part-time R.N.s while R.N.s with a higher number of inservice hours perceived a higher level of learning need than did R.N.s with a lower number of inservice hours. The correlations indicated that needs for inservice education are generalized feelings of need rather than particularized feelings of need.

Administrators generally rated the needs of R.N.s higher than did the R.N.s. While there were some differences between R.N.s when grouped by demographic characteristics, generally speaking the needs were constant and applied to all respondents.

R.N.s indicated a preference for flexible inservices, inservices separate from scheduled work days, and time allocated for programs.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Chapter 5 contains the summary, conclusions, and recommendations of the study.

Summary

Purpose of the Study

The purpose of the study was to perform an assessment of perceived gerontological learning needs of R.N.s working in LTC facilities in Alberta. From this needs assessment, information could be derived upon which inservice programs could be planned, developed, and implemented to meet the learning needs of R.N.s.

Methodology

Questionnaires were circulated to 94 LTC facilities in Alberta that care mainly for the aged. Different types of questionnaire were used, one for R.N.s and one for administrators. Of the 571 questionnaires which were distributed, return rates of 93 % for administrators, and 42 % for R.N.s were obtained.

The questionnaires asked about demography, knowledge needs, skill needs, feeling needs, and inservice format preferences. Additional comments about needs were invited.

Demographic characteristics of respondents, and perceived learning needs were summarized by frequency. Means tests were performed on perceptions of needs and preferences of various sub-groups.

Aggregated knowledge needs, skill needs, and feeling needs, were created as new variables and correlations were examined.

Learning needs by stage of resident flow were then addressed by creating new variables entitled admission, treatment plan, resident care, discharge, and palliative care. Means tests were performed on each variable to determine highest level of perceived needs according to stage of resident flow. A t-test was performed to detect differences between administrators and R.N.s.

Findings

Findings are summarized by addressing the sub-problems as specified in Chapter 1.

Information in the Literature

Statistics and population projections indicate that Canada's elderly population is increasing quickly. Not enough nurses are trained appropriately or prefer working with the elderly. Although information in

the literature is conflicting, it seems that educational programs have helped improve attitudes of nurses and in return, their care of patients. Several needs assessments have been done among nursing groups working with the aged and differing priorities have been identified by various respondents. It appears that needs tend to be specific to the particular group polled.

Perceived Gerontological Learning Needs of R.N.s

R.N. perceptions. Except for the item of policies, all knowledge needs perceived by R.N.s received a mean rating above three. The top ten learning needs indicated by R.N.s included drug therapy and interactions, Alzheimer's disease, ethical aspects of resuscitation, psychological assessment of the aged, legal aspects of negligence, depression of the aged, physical assessment of the aged, psychological aspects of aging, cognitive impairment, and death and dying.

All skill needs were rated with a mean above three. The highest rated needs were managing difficult behavior, managing conflict with relatives of residents, providing palliative care, monitoring wandering behavior, advocating for residents, encouraging participation of relatives in care, communicating with relatives of residents, listening to residents, evaluating nursing care, and teaching NAs and RNAs.

The means for R.N.s' perceived feeling needs ranged from 2.4 to 3.2. The five highest rated items indicated a need to understand how established residents feel about aspects of life in LTC, to be more diligent

in learning about care of the aged, to encourage the aged more regarding their abilities, to appreciate more the feelings of residents on admission, and to feel more united with the health care team.

Correlations between the skill areas of knowledge, skill and feeling needs were highly significant indicating that if an individual perceived a learning need in one area, there was a high probability that the person would perceive a learning need in another domain. This finding indicated that learning needs are generalized feelings of need rather than particularized feelings of need. Thus, people who feel needs will be attracted to programs almost regardless of the topic, while those who do not feel needs, will be less inclined to attend. This information suggests that the inservice education coordinator or instructor needs to function as a motivator.

Perceived learning needs were also assessed according to stage of resident flow. Learning needs were found to be of a similar level throughout the resident flow stages.

Administrators' perceptions. Administrators perceived that R.N.s had high learning needs in all areas. In the knowledge area, the means for all items was above three. They perceived that the highest learning needs of R.N.s were ethical aspects of resuscitation, drug therapy and interactions, legal aspects of negligence, depression of the aged, psychological assessment of the aged, cognitive impairment, Alzheimer's disease, settling in problems of new residents, pychological aspects of aging, and physical assessment of the aged.

The skill needs of R.N.s as perceived by administrators all had means above three. The list of most highly rated skill needs included managing difficult behavior, evaluating nursing care, managing conflict with relatives of residents, teaching NAs and RNAs, communicating with NAs and RNAs, listening to residents, monitoring wandering behavior, advocating for residents, encouraging participation of relatives in care, and coordinating nursing care.

The rating of feeling needs by administrators ranged from 3.0 to 3.6. The highest rated needs were a need for R.N.s to try harder to understand how established residents feel about aspects of life in LTC, to be more diligent in learning about care of the aged, to encourage the aged more regarding their abilities, to appreciate more the feelings of residents on admission, and to feel more united with the health care team.

Comparison of administrator and R.N. perceptions. The learning needs in the knowledge, skill, and feeling areas were rated quite highly by both administrators and R.N.s.

Of the top ten knowledge needs as rated by both groups, nine were identical. These were, ethical aspects of resuscitation, drug therapy and interactions, legal aspects of negligence, depression of the aged, psychological assessment of the aged, cognitive impairment, Alzheimer's disease, psychological aspects of aging, and physical assessment of the aged. The most highly mentioned other knowledge needs recorded by both groups were guardianship or trusteeship, and the role of the residents' families.

With respect to skill needs, commonalities again emerged. Eight of the most highly rated skill needs were identical between the groups and encompassed managing difficult behavior, managing conflict with relatives of residents, teaching NAs and RNAs, listening to residents, monitoring wandering behavior, advocating for residents, and encouraging participation of relatives in care. The other skill needs which were most highly emphasized by the groups were managing problem behavior and managing time.

In analyzing the group comparisons of R.N.s feeling needs, it was found that the five most highly rated topics were identical for both groups and appeared in exactly the same order. The topics were:

1. The need for R.N.s to try harder to understand how established residents feel about aspects of life in LTC
2. The need for R.N.s to be more diligent in learning about care of the aged
3. The need for R.N.s to encourage the aged more regarding their abilities
4. The need for R.N.s to appreciate more, the feelings of residents on admission
5. The need for R.N.s to feel more united with the health care team.

Generally, administrators rated R.N.s' learning needs higher than the R.N.s did. When knowledge need, skill need, and feeling need were created as new variables, a significant difference was discovered between administrators and R.N.s in the area of feeling needs. Administrators

perceived that R.N.s had higher learning needs in the feeling area than R.N.s did. With respect to stage of resident flow, administrators again perceived that R.N.s had higher needs than did R.N.s.

Format preferences

Inservice format preferences were also noted. The most highly rated preferences of R.N.s were: repeated on different shifts, videotaped to enable viewing as time permits, one day inservices, half day inservices, and one hour inservices. Of the 11 items listed, three out of the top five were similar for both groups. The groups preferred inservice programming repeated on different shifts, videotaped to enable viewing as time permits, and one hour inservices. Other inservice format suggestions that were most highly suggested included time allocation for inservices, inservices between 1400 and 1600 hours, and inexpensive programs.

Differences in R.N.s' Views when Grouped by Selected Demographic and Contextual Characteristics

Relatively few statistically significant differences were found based on sub-group characteristics. It must be remembered that there is a statistical probability of significant differences occurring by chance when multiple comparisons are made. Also the actual differences in scale means were not considered to be large. For these reasons it can be concluded that the perceptions of R.N.s are typical of the majority of respondents.

Significant differences were found in a number of cases between sub-groupings of R.N.s. There was a tendency for full-time R.N.s to perceive greater learning needs in some areas compared with part-time R.N.s. Years of experience in nursing seemed to be unrelated to perceived learning needs, but there was a contingency for years of gerontological nursing experience. R.N.s with 8 to 10 years of gerontological experience appeared to feel lower levels of need in some instances than did their less and more experienced counterparts. Perception of learning needs did not seem related to formal education level but R.N.s with more inservice hours showed a tendency toward higher perception of learning need in some areas.

When grouped by facility characteristics, some significant findings were evident. Higher learning need ratings in several items were expressed by R.N.s employed in older facilities, publicly funded facilities, and facilities with 51 to 100 beds. Thus age, funding, and bed capacity may have some relationship to the learning needs of R.N.s employed therein.

Conclusions

Based on the findings of this survey of perceived gerontological learning needs of R.N.s employed in LTC facilities in Alberta, the following conclusions are presented.

Some of the findings of the study have supported those outlined in the literature. The greater level of administrator response was also evidenced by Werner (1988), Canar and Johnson (1986), and Hibbert (1985). Low R.N. response rates were experienced by Volin (1982) and Wright (1987). The tendency for administrators to rate learning needs of R.N.s greater than R.N.s supported Werner's findings. The higher percentage of nurses who had more than 11 years nursing experience was also found by Werner. Highly rated format preferences in this study supported Hibbert's research wherein one day inservices were highly preferred, and Werner's findings of preferences for inservice repeated on different shifts and one day programs.

Findings indicate that R.N.s perceive gerontological learning needs related to the Canadian Standards of Gerontological Nursing (1989). More specifically, these perceived learning needs coincide with the uniqueness of older people (Standard 1), functional ability and independence (Standard 2), mastery of the environment (Standard 3), gerontological nursing knowledge (Standard 4), sustaining interpersonal relationships (Standard 5), advocacy (Standard 6), and the nursing process (Standard 7).

Findings of the study also differed with previous studies. Robb and Malenzak (1981) found a high response rate of R.N.s when questionnaires were returned to a central collection point. A higher ratio of part-time R.N.s was not found by Werner (1988). The more highly rated learning needs found in this study were not similar to those of Headricks (1982), Miller

(1987), Werner (1988), or Wright (1987). However, it must be noted that different items were included in the questionnaire used in this study. Since no studies have used a similar conceptual framework highlighting stage of resident flow, no literature support can be discussed.

Time for inservice education needs to be addressed. R.N.s wrote many comments which indicated a general lack of time to participate in inservice. A new approach must be considered. Instead of viewing R.N.s as hourly workers, they should be seen as professionals. There is a need for reflection, study, and learning as part of the nursing ethic. Meeting learning needs is as important as caring for residents. Time needs to be scheduled for staff to attend inservices. Allocation of professional development days, just as teachers presently experience, should be considered. Another alternative would be to require a certain number of educational contact hours within the registration stipulations. The most remarkable finding of the study is that more than half of respondents had participated in less than 11 hours of inservice in the past two years.

Motivation is an important part of inservice education. Inservice educators need to be motivators. Creative methods of program delivery such as role playing may assist in this area. Recognition of staff who participate in inservice should be considered.

The finding that full-time R.N.s expressed greater perceived learning needs than part-time R.N.s is puzzling. One conclusion would be that part-time R.N.s have lower perceived learning needs than full-time R.N.s. Another interpretation is that part-time R.N.s consider learning to be less

important suggesting perceived learning needs are linked to attitudes toward learning. Thus a high level of perceived learning need might indicate a laudable professional attitude.

Generalizability of Findings

Although this study drew a fairly large, random sample of stratified LTC facilities throughout Alberta, the generalizability of the findings must be considered cautiously. Since learning needs are individual to each R.N., pools of learning needs may vary within and among LTC facilities. The results of this study, however, are potentially valuable for planning and developing inservice education programs in LTC facilities and could be utilized until shown not to apply in a specific situation.

Recommendations

This study has provided useful information but some recommendations should be considered.

Recommendations relating to Needs Assessments

1. Further exploration of gerontological learning needs of nurses employed in other LTC facilities, acute care facilities, and community health agencies should be undertaken.

2. Further gerontological learning needs assessments of R.N.s working in LTC, utilizing the conceptual framework should be undertaken to expand the data base. A questionnaire incorporating an "importance" response as well as a "need" response should be considered.

Recommendations relating to Gerontology Content in Basic Nursing Programs

1. More gerontological content should be provided in the curricula of basic nursing programs.

2. Gerontological nursing should be included as a licensure topic.

Recommendations relating to Inservice Education Presentation in LTC Facilities

1. Inservice programs should be launched encompassing the more highly rated knowledge, skill, and feeling topics.

2. Inservice program formats should include the preferences of R.N.s outlined in this study (repeated on different shifts, videotaped, one day inservices, half day inservices, and one hour inservices).

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APPENDIX A

Expanded Questionnaire Item Matrix

CARE DIMENSION	STAGE OF RESIDENT FLOW 1	2	3	4	5
	ADMISSION	TREATMENT PLAN	RESIDENT CARE	DISCHARGE	PALLIATIVE CARE
Facility Administration	(9) 10,42,47,54,75	(7) 10,42,47,48,68	(7) 42,47,48,54,68	(8) 10,47,54,64,65	(8) 47,48,54,65,68
Supervision of NA's and RNA's	(8) 10,50,52,54,75	(6) 10,50,51,52,53	(7) 10,47,50,51,52	(7) 51,52,53,54,64	(7) 51,52,53,54,65
Health Care Team	(12) 12,57,68,75,84	(10) 55,56,57,68,84	(11) 12,41,57,68,84	(11) 12,50,55,64,84	(11) 10,50,56,65,84
Relatives	(10) 41,44,61,68,75	(8) 54,60,61,62,68	(9) 10,47,60,62,68	(9) 60,61,62,64,68	(9) 10,61,62,65,68
Physical	(8) 54,66,69,72,75	(16) 10,20,31,54,72	(17) 13,21,30,47,69	(17) 17,24,54,66,72	(17) 19,23,32,65,72
Medical	(17) 28,54,67,82,83	(15) 35,54,59,68,83	(16) 34,38,47,55,67	(16) 38,39,55,64,83	(16) 29,54,59,67,82
Psychological	(25) 36,40,58,76,81	(23) 25,37,58,79,81	(24) 10,18,58,73,79,80	(24) 15,19,40,71,79	(24) 21,33,63,76,80
Sociological	(9) 10,43,45,54,75	(7) 16,26,44,45,54	(8) 10,16,26,45,47	(8) 26,44,45,54,64	(8) 26,44,45,54,65
Spiritual	(9) 19,27,43,54,75	(7) 18,19,27,46,54	(8) 18,19,27,46,47	(8) 11,19,27,46,64	(8) 18,19,27,54,65
Total items	117	99	107	108	108

Note. Some sample questionnaire items are indicated in the cells. Numbers in brackets indicate number of questionnaire items in cell.

APPENDIX B

Letter to Participants in Pilot Study

52027 - Range Road 221
Sherwood Park, Alta.
T8E IC6
March 13, 1989

Dear Long-term Care Staff,

The R.N. and administrative staff of this facility have been selected to pilot test the questionnaire that has been developed to determine gerontological learning needs of R.N.s employed in long-term care facilities throughout Alberta. This study will form the basis of my thesis which will be written to obtain my Master's Degree in Educational Administration at the University of Alberta.

Permission to carry out this pilot test has been obtained from both the Director of Patient Services and the Coordinator.

The purpose of this pilot test is to discover if clarifications, alternate wordings or added items are necessary to improve the questionnaire. Questionnaires are not coded so responses will be anonymous.

Please complete the questionnaire and write any suggestions for improvement directly on the questionnaire.

Yours truly,

Jean L. Greschuk BScN

APPENDIX C

Questionnaires used in Study

QUESTIONNAIRE FOR ADMINISTRATORS
(Directors of Patient Care, Supervisors, Coordinators)

for office use only

Gerontological Nursing Learning Needs Assessment

Basic nursing programs have not consistently included gerontology in their basic curriculum. It is necessary to discover what nurses who care for the aged need to know so that inservice programs can be designed to meet this need.

_ _ _ 1/4

Part I: Personal and Professional Data

Please circle the number which best describes your situation.

1. My major role in nursing is:

Administrator/Director	1	5
Supervisor/Coordinator/Head Nurse	2	
Staff Nurse	3	
Nurse Educator	4	
Other (specify) _____	5	

2. I am employed:

Full time (37 3/4 hrs. or more per week)	1	6
Part time (less than 37 3/4 hrs. per week)	2	

3. My number of years of nursing work experience is:

Less than 2 years	1	7
2 to 4 years	2	
5 to 7 years	3	
8 to 10 years	4	
More than 11 years	5	

4. My number of years of nursing work experience in gerontology (working with the aged) is:

Less than 2 years	1	8
2 to 4 years	2	
5 to 7 years	3	
8 to 10 years	4	
More than 11 years	5	

5. The long-term care facility that I work in is:

Publicly funded	1	9
Privately funded	2	

6. The long-term care facility that I work in has been operating for:

Less than 5 years	1	10
5 to 9 years	2	
10 to 14 years	3	
15 to 19 years	4	
20 years or more	5	

7. The number of beds in the long-term care facility in which I work is:

1 to 50	1	11
51 to 100	2	
101 or more	3	

8. My current level of completed education is:

R.N.Diploma	1	12
Post R.N. Diploma or Certificate	2	
Baccalaureate Degree	3	
Master's or Doctoral Degree	4	
Other (specify)_____	5	

9. I have been in an administrative postition in long-term care for:

less than 2 years	1	13
2 to 5 years	2	
6 to 9 years	3	
longer than 10 years	4	

Part II: Content Areas for Gerontological Nursing Education

for office use only

Many topics are outlined in the literature about learning needs of nurses working in gerontology. From your perspective as an R.N., to what extent do you feel a need for further knowledge in the following areas? Circle the appropriate response.

	Section I: Knowledge Needs	high need				low need	
10.	Policies and procedures as listed in the Policy and Procedure manual.	5	4	3	2	1	14
11.	Resident rights relating to nursing and medical care.	5	4	3	2	1	15
12.	Role of team members (e.g. physiotherapist, pharmacist).	5	4	3	2	1	16
13.	Theories of aging.	5	4	3	2	1	17
14.	Physical aspects of aging.	5	4	3	2	1	18
15.	Psychological aspects of aging.	5	4	3	2	1	19
16.	Social aspects of aging.	5	4	3	2	1	20
17.	Sexuality and aging.	5	4	3	2	1	21
18.	Losses and grief.	5	4	3	2	1	22
19.	Death and dying.	5	4	3	2	1	23
20.	Falls and restraints.	5	4	3	2	1	24
21.	The importance of keeping residents mobile.	5	4	3	2	1	25
22.	Hygiene for the aged.	5	4	3	2	1	26
23.	Nutrition for the aged.	5	4	3	2	1	27
24.	Physical assessment of the aged.	5	4	3	2	1	28
25.	Psychological assessment of the aged.	5	4	3	2	1	29
26.	Sociological assessment of the aged.	5	4	3	2	1	30

		high need				low need	for office use only
27.	Spiritual assessment of the aged.	5	4	3	2	1	31
28.	Rehabilitation procedures.	5	4	3	2	1	32
29.	Drug therapy and interactions.	5	4	3	2	1	33
30.	Incontinence.	5	4	3	2	1	34
31.	Hearing impairment.	5	4	3	2	1	35
32.	Vision impairment.	5	4	3	2	1	36
33.	Cognitive impairment (impaired comprehension, judgment, memory and reasoning).	5	4	3	2	1	37
34.	Diabetes.	5	4	3	2	1	38
35.	Cancer.	5	4	3	2	1	39
36.	Depression of the aged.	5	4	3	2	1	40
37.	Alzheimers' Disease.	5	4	3	2	1	41
38.	Heart or blood vessel disease.	5	4	3	2	1	42
39.	Stroke.	5	4	3	2	1	43
40.	Suicide and the aged.	5	4	3	2	1	44
41.	Ethical aspects of resuscitation.	5	4	3	2	1	45
42.	Legal aspects of negligence.	5	4	3	2	1	46
43.	Settling in problems of newly admitted residents in long-term care.	5	4	3	2	1	47
44.	Culturally determined behavior of residents.	5	4	3	2	1	48
45.	Awareness of the resident's past, present and future potential.	5	4	3	2	1	49
46.	Spiritual needs of residents.	5	4	3	2	1	50

		high need				low need	for office use only
47.	Standards of care for the aged.	5	4	3	2	1	51
48.	Government requirements of care of the aged.	5	4	3	2	1	52
49.	Other (specify) _____ _____	5	4	3	2	1	53
	Section II: Skill Needs						
50.	Matching work assignments to staff abilities.	5	4	3	2	1	54
51.	Supervising N.A.s and R.N.A.s.	5	4	3	2	1	55
52.	Teaching N.A.s and R.N.A.s.	5	4	3	2	1	56
53.	Communicating with N.A.s and R.N.A.s.	5	4	3	2	1	57
54.	Coordinating nursing care.	5	4	3	2	1	58
55.	Evaluating nursing care.	5	4	3	2	1	59
56.	Participating as a team member.	5	4	3	2	1	60
57.	Communicating with health care team.	5	4	3	2	1	61
58.	Communicating with residents.	5	4	3	2	1	62
59.	Communicating with doctors.	5	4	3	2	1	63
60.	Encouraging participation of relatives in resident care.	5	4	3	2	1	64
61.	Managing conflict with relatives of resident.	5	4	3	2	1	65
62.	Communicating with relatives of residents.	5	4	3	2	1	66
63.	Listening.	5	4	3	2	1	67
64.	Planning for discharge of residents from long-term care.	5	4	3	2	1	68
65.	Providing palliative care.	5	4	3	2	1	69

		high need				low need	for office use only
66.	Providing recreation and exercise.	5	4	3	2	1	70
67.	Planning nursing care.	5	4	3	2	1	71
68.	Advocating for residents.	5	4	3	2	1	72
69.	Lifting, transferring and moving residents while protecting self.	5	4	3	2	1	73
70.	Maintaining safety measures to ensure resident safety.	5	4	3	2	1	74
71.	Maintaining privacy of resident.	5	4	3	2	1	75
72.	Monitoring wandering behavior.	5	4	3	2	1	76
73.	Managing difficult behavior.	5	4	3	2	1	77
74.	Other (specify) _____ _____.	5	4	3	2	1	78

	Section III: Feeling Needs	high need				low need	1 2 3 4
75.	R.N.s need to appreciate more the feelings of residents on admission.	5	4	3	2	1	5
76.	R.N.s need to be more congenial (friendly) to residents.	5	4	3	2	1	6
77.	R.N.s need to try harder to understand how established residents feel about aspects of life in long-term care.	5	4	3	2	1	7
78.	R.N.s need to respect residents more.	5	4	3	2	1	8
79.	R.N.s need to be more patient with older people.	5	4	3	2	1	9
80.	R.N.s need to be more caring toward the aged.	5	4	3	2	1	10
81.	R.N.s need to encourage the aged more regarding their abilities.	5	4	3	2	1	11

		high need				low need	for office use only
82.	I need to be more diligent in learning about care of the aged.	5	4	3	2	1	12
83.	I need to be more open with residents about their nursing care.	5	4	3	2	1	13
84.	I need to feel more united with the health care team.	5	4	3	2	1	14
85.	I need to feel more (specify) _____ toward residents.	5	4	3	2	1	15

Part III: Preferred Format or Structure of Programs

Please circle the number to the right, which most accurately reflects your views.

86. My preference for educational program delivery (inservice) in gerontological nursing is:

		high acceptability				low acceptability	
a.	two day inservices	5	4	3	2	1	16
b.	one day inservices	5	4	3	2	1	17
c.	half day inservices	5	4	3	2	1	18
d.	one hour inservices	5	4	3	2	1	19
e.	1/2 hour inservices	5	4	3	2	1	20
f.	self-study packages	5	4	3	2	1	21
g.	teleconference	5	4	3	2	1	22
h.	on videotape so it can be watched when there's time	5	4	3	2	1	23
i.	held in the afternoon between 1300 and 1500 hours	5	4	3	2	1	24

		high acceptability			low acceptability		for office use only
j.	held in the morning between 1000 and 1200 hours	5	4	3	2	1	25
k.	repeated on different shifts	5	4	3	2	1	26
l.	other (specify) _____	5	4	3	2	1	27

Thank you very much for your cooperation in the completion of this questionnaire. Your time and patience are greatly appreciated. Please enclose your questionnaire in the envelope provided and return to:

Jean Greschuk
52027-Range Road 221
Sherwood Park, Alberta
T8E 1C6

QUESTIONNAIRE FOR R.N.s

for office use only

Gerontological Nursing Learning Needs Assessment

Basic nursing programs have not consistently included gerontology in their basic curriculum. It is necessary to discover what nurses who care for the aged need to know so that inservice programs can be designed to meet this need.

_ _ _ 1/4
1 2 3

Part I: Personal and Professional Data

Please circle the number which best describes your situation.

1. My major role in nursing is:

Administrator/Director	1	5
Supervisor/Coordinator/Head Nurse	2	
Staff Nurse	3	
Nurse Educator	4	
Other (specify) _____	5	

2. I am employed:

Full time (37 3/4 hrs. or more per week)	1	6
Part time (less than 37 3/4 hrs. per week)	2	

3. My number of years of nursing work experience is:

Less than 2 years	1	7
2 to 4 years	2	
5 to 7 years	3	
8 to 10 years	4	
More than 11 years	5	

4. My number of years of nursing work experience in gerontology (working with the aged) is:

Less than 2 years	1	8
2 to 4 years	2	
5 to 7 years	3	
8 to 10 years	4	
More than 11 years	5	

5. The long-term care facility that I work in is:

Publicly funded	1	9
Privately funded	2	

6. The long-term care facility that I work in has been operating for:

Less than 5 years	1	10
5 to 9 years	2	
10 to 14 years	3	
15 to 19 years	4	
20 years or more	5	

7. The number of beds in the long-term care facility in which I work is:

1 to 50	1	11
51 to 100	2	
101 or more	3	

8. My current level of completed education is:

R.N.Diploma	1	12
Post R.N. Diploma or Certificate	2	
Baccalaureate Degree	3	
Master's or Doctoral Degree	4	
Other (specify) _____	5	

9. Number of inservice hours in gerontology programming that you have attended in the last two years:

None	1	13
1 to 10 hours	2	
11 to 20 hours	3	
21 to 30 hours	4	
More than 30 hours	5	

Part II: Content Areas for Gerontological Nursing Education

for office use only

Many topics are outlined in the literature about learning needs of nurses working in gerontology. From your perspective as an R.N., to what extent do you feel a need for further knowledge in the following areas? Circle the appropriate response.

	Section I: Knowledge Needs	high need				low need	
10.	Policies and procedures as listed in the Policy and Procedure manual.	5	4	3	2	1	14
11.	Resident rights relating to nursing and medical care.	5	4	3	2	1	15
12.	Role of team members (e.g. physiotherapist, pharmacist).	5	4	3	2	1	16
13.	Theories of aging.	5	4	3	2	1	17
14.	Physical aspects of aging.	5	4	3	2	1	18
15.	Psychological aspects of aging.	5	4	3	2	1	19
16.	Social aspects of aging.	5	4	3	2	1	20
17.	Sexuality and aging.	5	4	3	2	1	21
18.	Losses and grief.	5	4	3	2	1	22
19.	Death and dying.	5	4	3	2	1	23
20.	Falls and restraints.	5	4	3	2	1	24
21.	The importance of keeping residents mobile.	5	4	3	2	1	25
22.	Hygiene for the aged.	5	4	3	2	1	26
23.	Nutrition for the aged.	5	4	3	2	1	27
24.	Physical assessment of the aged.	5	4	3	2	1	28
25.	Psychological assessment of the aged.	5	4	3	2	1	29
26.	Sociological assessment of the aged.	5	4	3	2	1	30

		high need				low need	for office use only
27.	Spiritual assessment of the aged.	5	4	3	2	1	31
28.	Rehabilitation procedures.	5	4	3	2	1	32
29.	Drug therapy and interactions.	5	4	3	2	1	33
30.	Incontinence.	5	4	3	2	1	34
31.	Hearing impairment.	5	4	3	2	1	35
32.	Vision impairment.	5	4	3	2	1	36
33.	Cognitive impairment (impaired comprehension, judgment, memory and reasoning).	5	4	3	2	1	37
34.	Diabetes.	5	4	3	2	1	38
35.	Cancer.	5	4	3	2	1	39
36.	Depression of the aged.	5	4	3	2	1	40
37.	Alzheimers' Disease.	5	4	3	2	1	41
38.	Heart or blood vessel disease.	5	4	3	2	1	42
39.	Stroke.	5	4	3	2	1	43
40.	Suicide and the aged.	5	4	3	2	1	44
41.	Ethical aspects of resuscitation.	5	4	3	2	1	45
42.	Legal aspects of negligence.	5	4	3	2	1	46
43.	Settling in problems of newly admitted residents in long-term care.	5	4	3	2	1	47
44.	Culturally determined behavior of residents.	5	4	3	2	1	48
45.	Awareness of the resident's past, present and future potential.	5	4	3	2	1	49
46.	Spiritual needs of residents.	5	4	3	2	1	50

		high need				low need	for office use only
47.	Standards of care for the aged.	5	4	3	2	1	51
48.	Government requirements of care of the aged.	5	4	3	2	1	52
49.	Other (specify) _____ _____	5	4	3	2	1	53
	Section II: Skill Needs						
50.	Matching work assignments to staff abilities.	5	4	3	2	1	54
51.	Supervising N.A.s and R.N.A.s.	5	4	3	2	1	55
52.	Teaching N.A.s and R.N.A.s.	5	4	3	2	1	56
53.	Communicating with N.A.s and R.N.A.s.	5	4	3	2	1	57
54.	Coordinating nursing care.	5	4	3	2	1	58
55.	Evaluating nursing care.	5	4	3	2	1	59
56.	Participating as a team member.	5	4	3	2	1	60
57.	Communicating with health care team.	5	4	3	2	1	61
58.	Communicating with residents.	5	4	3	2	1	62
59.	Communicating with doctors.	5	4	3	2	1	63
60.	Encouraging participation of relatives in resident care.	5	4	3	2	1	64
61.	Managing conflict with relatives of residents.	5	4	3	2	1	65
62.	Communicating with relatives of residents.	5	4	3	2	1	66
63.	Listening.	5	4	3	2	1	67
64.	Planning for discharge of residents from long-term care.	5	4	3	2	1	68
65.	Providing palliative care.	5	4	3	2	1	69

		high need				low need	for office use only
66.	Providing recreation and exercise.	5	4	3	2	1	70
67.	Planning nursing care.	5	4	3	2	1	71
68.	Advocating for residents.	5	4	3	2	1	72
69.	Lifting, transferring and moving residents while protecting self.	5	4	3	2	1	73
70.	Maintaining safety measures to ensure resident safety.	5	4	3	2	1	74
71.	Maintaining privacy of resident.	5	4	3	2	1	75
72.	Monitoring wandering behavior.	5	4	3	2	1	76
73.	Managing difficult behavior.	5	4	3	2	1	77
74.	Other (specify) _____ _____	5	4	3	2	1	78

	Section III: Feeling Needs	high need				low need	$\frac{1}{1}$ $\frac{2}{2}$ $\frac{3}{3}$ $\frac{2}{4}$
75.	I need to appreciate more the feelings of residents on admission.	5	4	3	2	1	5
76.	I need to be more congenial (friendly) to residents.	5	4	3	2	1	6
77.	I need to try harder to understand how established residents feel about aspects of life in long-term care.	5	4	3	2	1	7
78.	I need to respect residents more.	5	4	3	2	1	8
79.	I need to be more patient with older people.	5	4	3	2	1	9
80.	I need to be more caring toward the aged.	5	4	3	2	1	10
81.	I need to encourage the aged more regarding their abilities.	5	4	3	2	1	11

		high need				low need	for office use only
82.	R.N.s need to be more diligent in learning about care of the aged.	5	4	3	2	1	12
83.	R.N.s need to be more open with residents about their nursing care.	5	4	3	2	1	13
84.	R.N.s need to feel more united with the health care team.	5	4	3	2	1	14
85.	R.N.s need to feel more (specify) _____ toward residents.	5	4	3	2	1	15

Part III: Preferred Format or Structure of Programs

Please circle the number to the right, which most accurately reflects your views.

86. My preference for educational program delivery (inservice) in gerontological nursing for R.N.s is:

		high acceptability				low acceptability	
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b.	one day inservices	5	4	3	2	1	17
c.	half day inservices	5	4	3	2	1	18
d.	one hour inservices	5	4	3	2	1	19
e.	1/2 hour inservices	5	4	3	2	1	20
f.	self-study packages	5	4	3	2	1	21
g.	teleconference	5	4	3	2	1	22
h.	on videotape so it can be watched when there's time	5	4	3	2	1	23
i.	held in the afternoon between 1300 and 1500 hours	5	4	3	2	1	24

		high acceptability			low acceptability		
j.	held in the morning between 1000 and 1200 hours	5	4	3	2	1	25
k.	repeated on different shifts	5	4	3	2	1	26
l.	other (specify) _____	5	4	3	2	1	27

Thank you very much for your cooperation in the completion of this questionnaire. Your time and patience are greatly appreciated. Please enclose your questionnaire in the envelope provided and return to:

Jean Greschuk
52027-Range Road 221
Sherwood Park, Alberta
T8E 1C6

APPENDIX D

Initial Contact Letter

52027 - Range Road 221
Sherwood Park, Alta.
T8E IC6
May 13, 1989

Dear Director of Patient Care,

Gerontological nursing is expanding at a rapid pace. Currently however, our basic nursing programs do no consistently provide adequate gerontological content in their programs. Therefore, the nurses that staff our long-term care facilities have varying levels of education and skills in gerontological nursing.

I am currently doing research to assess the gerontological learning needs of R.N.s working in long-term care facilities in Alberta. This research is being supervised by Dr. J. Small of the Educational Administration Department at the University of Alberta. I plan to make recommendations regarding educational learning needs in gerontology around which inservice education and continuing education may be planned. Consolidated results of this study will be made available to participating long-term care facilities.

I would greatly appreciate your participation in this study. Separate questionnaires for R.N.s and administrators (Directors of Patient Care, Supervisors, Coordinators, etc.) are enclosed. Self-addressed envelopes are provided so they may be mailed directly to me. Since envelopes are uncoded, anonymity of response is assured. Each response is vitally important in ensuring that this study represents learning needs of all R.N.s working in long-term care in Alberta.

Thank you for you participation in this research. This study will be one more step towards meeting the great challenge we face in gerontological nursing today.

Yours truly,

Jean L. Greschuk BScN
(MEd candidate, U of A)

APPENDIX E

Covering Letters for Administrators and R.N.s

52027 - Range Road 221
Sherwood Park, Alta.
T8E IC6
May 13, 1989

Dear Director of Nursing, Supervisor, or Coordinator,

The R.N. and administrative staff of this facility have been randomly selected to complete a questionnaire that has been developed to determine gerontological learning needs of R.N.s employed in long-term care facilities throughout Alberta. This study will form the basis of a thesis which will be written to obtain my Master's Degree in Educational Administration at the University of Alberta.

As envelopes are not coded, anonymity of response is assured. Consolidated results of this research will be shared with participating long-term care facilities.

Please complete the attached questionnaire and mail it in the enclosed self-addressed envelope.

I appreciate the time you take to complete this questionnaire as each response is vitally important in ensuring that this study represents learning needs of all R.N.s working in long-term care in Alberta.

Yours truly,

Jean L. Greschuk BScN
(MEd candidate, U of A)

52027 - Range Road 221
Sherwood Park, Alta.
T8E IC6
May 13, 1989

Dear R.N.,

The R.N. and administrative staff of this facility have been randomly selected to complete a questionnaire that has been developed to determine gerontological learning needs of R.N.s employed in long-term care facilities throughout Alberta. This study will form the basis of a thesis which will be written to obtain my Master's Degree in Educational Administration at the University of Alberta.

As envelopes are not coded, anonymity of response is assured. Consolidated results of this research will be shared with participating long-term care facilities.

Please complete the attached questionnaire and mail it in the enclosed self-addressed envelope.

I appreciate the time you take to complete this questionnaire as each response is vitally important in ensuring that this study represents learning needs of all R.N.s working in long-term care in Alberta.

Yours truly,

Jean L. Greschuk BScN
(MEd candidate, U of A)

APPENDIX F

Reminder Letter

52027-R.R. 221
Sherwood Park, Alta.
T8E-1C6
June 24, 1989

Dear Colleague in Long-Term Care,

I would like to convey a special "thank you" to those R.N.s and administrators in your facility that have taken the time to complete the "Gerontological Learning Needs Assessment" questionnaire.

If any R.N.s or administrators have not as yet mailed back their questionnaires, I would still appreciate their participation since every response is vital to the results of this study.

Additional questionnaires may be obtained by phoning me collect after 5 p.m. at 0-922-3241.

Yours truly,

Jean Greschuk BScN

M Ed Candidate